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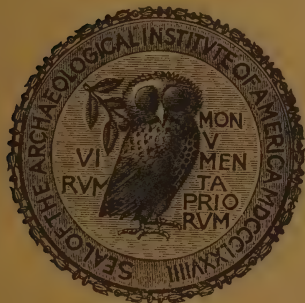
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Theodor Mommsen

1817-1903

Foreign Honorary Member
of the
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A REVISED LIST OF ROMAN MEMORIAL AND TRIUMPHAL ARCHES

ABOUT fifteen years ago Dr. Botho Graef published in vol. III of Baumeister's *Denkmäler des klassischen Alterthums* an article entitled 'Triumph- und Ehrenbögen,' which has remained, ever since, the classic treatment of the subject of Roman memorial and triumphal arches. Its success was due to its systematic analysis and its distinction of the different artistic forms of the free-standing arch, which enabled the author to group them under certain types: it was due also to the useful chronological tables, with their measurements and bibliography.

The time has come, however, when students of Roman art can no longer remain satisfied with this sketch, masterly as it is in many ways. Its limitations are too obvious, especially those due to limitation of space. It takes no account of the study of the rich epigraphical material relating to the arches, — a field still practically unexplored. It does not study the relation of the arch to Roman life as a personal or funerary, as a civic, religious, or political, memorial. The origin of the arch, in both its purpose and its form, its connection with the development of historic relief sculpture, are also themes that could naturally not be touched upon in so brief a space as a dictionary article. But what was most unexpected to me, and will be so, I feel sure, to nearly every scholar, is the fact that the list of arches given by Graef is in reality not only incomplete, but represents a minority of the monuments. It was only after several years of research that my own list of arches has grown to such an extent as to make it obviously

necessary to give a new table of statistics. According to Dr. Graef's statement there exist 125 arches, and about 30 more, though destroyed, are known from inscriptions, coins, and literature. This total of about 155 I have been able to increase to not far from 500. Of course this immense increase in numbers brings with it an enlarged idea of the artistic and civic capabilities of the arch.

Even the arches given by Graef require considerable rearrangement and pruning. His dates are not always correct; still oftener, arches which are placed on his undated list can be dated by their inscriptions. On the other hand, a number of arches which he classifies as still existing have been destroyed; one is a duplicate (Lattakieh = Laodicea), and another is apparently fanciful (Aurelian). The 125 existing arches on his list should therefore be reduced to 115. The corresponding arches on my list, classified as still existing, number *c.* 280. It might be supposed, in accounting for this increase, that the criteria of judgment as to the admission of arches to the list must be different from those of Graef, but this will not be found to be the case. Exploration and excavation in Asia Minor, Syria, and North Africa have furnished the bulk of the additions. A careful use of available reports on travel and discovery, both old and modern, yielded unexpectedly rich material. Of course there are no such spectacular novelties as the masterpieces of the official Roman school,—the arches of Titus and Beneventum,—or those at Orange and Oea (Tripoli). But such magnificent arches as those at Attalia and Damascus are far above the average in artistic beauty and historic interest. Among the additions the Porta Praetoria at Aosta and that at Turin, also, take their place in military architecture beside the Porta Nigra of Trier. There are entire groups of arches in the same city, planned in connection, for instance, with the colonnaded avenues, as at Philippopolis, Bostra, and Gerasa, in Syria and Arabia; they are invaluable for the reconstruction of the aspect of the great cities of the East.

It is my plan to publish shortly a volume on Roman arches that shall contain not only a description of every arch both now existing and destroyed, so far as known to me, but a study, also, of their origin, history, and various purposes, their civic importance and artistic forms. It will be based largely on a study of the epigraphical material, which has never been brought to bear upon the subject. This will be supplemented by numismatics and literature. The interesting subject of historic relief sculpture in connection with arches will be treated with reference not only to the sculptures still in place and to the many reliefs scattered throughout the museums and other collections of Europe, but also to the numerous drawings by Renaissance architects of works that have since perished.

There is certainly no theme in the wide field of Roman art which is packed so full of varied interest; none which seems to touch the life of every part of the Empire so universally.

Having brought the study almost to completion, although a final revision will require considerable travel during the coming year, it seemed best to publish a preliminary statement in the present brief form.

Evidently the first step is to clear the field by a revision of Graef's list; then, with the additional material, the complete list can be constructed. This is what I shall do in the present article, as an introduction to the coming volume.

It is clearly impossible to give in this article or in a half-dozen articles the evidence for the changes proposed in Graef's list, and especially for the mass of additions. A few arches are purposely omitted because it was undesirable to mention them without such evidence. I can only ask those who may see food for criticism to suspend judgment until the volume is published. For instance, it may seem like flying in the face of clear evidence to attribute the arch at Orange to Augustus instead of Tiberius, whose name is certainly on the inscription. I cannot here explain the reasons for joining the ranks of those who believe the inscription to be a later addition.

Then, again, it has not been easy to decide just where the line should be drawn between gates and arches that should be admitted and those to be omitted. Graef has admitted some absolutely simple city gateways, devoid even of inscriptions, as at Abuab = Seressitum. I have followed his example to some extent, as at Apisa. At the same time I have excluded most of the entrance gates to the great Roman camps, even with memorial inscriptions, except for one quite monumental pair at Holzhausen; neither are arches to private villas or forts admitted, even with memorial inscriptions, as in the castle of Hilarianus near Tipasa. Sometimes the monumental entrance arches to sacred enclosures are excluded. Perhaps the exclusion, for other reasons, of several magnificent temple propylaea is hardly correct. For instance, the propylaea at Baalbek include, back of the colonnade, two groups of three arcades at opposite ends of the corridor leading into the court, which might be construed as triple arches; but they seem hardly to have the necessary independence of design.

I have followed Graef's plan of two lists: one of arches that can be exactly or approximately dated; another of those to which there is no chronological clue. On the dated list I have placed many that can be ascribed even as loosely as to the Early Antonines or the Late Antonines, either from their style or the history of the city. In this way they can be made far more useful in a comparative study and the number of absolutely undated arches is much reduced.

The following is Graef's list — the first series of the datable, the second of the undatable, monuments. Where I have no change to suggest, no comment is added to the title. It will be noticed that in many cases, especially in North Africa, I do not adopt Graef's names, but use the ancient instead of the modern name. He seems to have no regular system; for he sometimes, though seldom, uses the ancient name. Especially in the case of ancient sites which now bear Arabic designations, there seemed far more reason to return to the original than in the case of European cities.

GRAEF'S LIST OF ARCHES REVISED

A. ARCHES DATED, EXACTLY OR APPROXIMATELY

1. S. REMY (France). *Triumphal Arch of the Iulii*. 52 (?) B.C.

The date 52 B.C., tentatively assigned, is too early, and unsupported by any evidence. The period of the triumvirs is adopted, both by the editors of the *C.I.L.* and by Desjardins (*Géog. de la Gaule rom.*), on account of the inscription on the mausoleum next to the arch. This would make it some ten years later. It is not a triumphal but a memorial arch connected with a mausoleum.

2. PERUGIA (Italy). *2 City Gates*. 39 B.C.

The two city gates of Perugia — one intact, the other destroyed except for part of its upper section — are assigned to a reconstruction of the city by Augustus in 39 B.C. But, in the first place, it has been shown that there is no proof that Augustus rebuilt the walls; and, in the second place, the inscription on the partly destroyed gate gives the name of the city as *Colonia Vibia Augusta Perusia*, a title which it did not receive until the third century, under Trebonianus Gallus. This confirms the artistic evidence that the two gates were by no means contemporary: one is pre-Augustan, of unknown date, restored under Augustus, and to which a memorial inscription was added under Augustus and another under Trebonianus; the other was renovated and inscribed under the latter emperor, 251–253 A.D.

3. RIMINI (Italy). *Arch of Augustus*. 27 B.C.
4. AOSTA (Italy). *Triumphal Arch of Augustus*. 25 B.C.
5. NISMES (France). *City Gate of Augustus*. 15 B.C.

Graef makes the mistake of describing this gate as having only two openings, whereas it belongs to the far rarer class of arches with four openings, — two large arched passages in the centre, flanked on either side by a low architraved passage for foot-passengers.

6. ROME. *Arch of Drusus* ("Arco di Druso"). 9 B.C.

The so-called "Arco di Druso," still existing inside the Porta S. Sebastiano at Rome, is supposed by Graef to be the arch built by the Senate to the elder Drusus after his death in 9 B.C. There is no evidence in favor of this identification, which is denied by several scholars, notably by Hülsen. The real arch of Drusus, built in 9 B.C., was nearer the Baths of Caracalla, and no longer exists.

7. SPOLETO (Italy). *Arch of Germanicus and Drusus*. 9 (?) B.C.

This arch, assigned doubtfully to 9 B.C. by Graef, seems to be attributed by him erroneously to the elder Drusus, when its inscription shows it to be a memorial of Germanicus and the younger Drusus, and to date, therefore, from 23 A.D. or later.

8. TRIEST (Dalmatia). *Honorary Arch of Augustus*. 9(?) B.C.

While nothing definite is known as to the date of this arch, its style is of the early part of the reign of Augustus, and the inscription giving the construction of the city walls in 33 B.C. may be considered as indicating the approximate date of this arch.

9. ROME. *Porta Tiburtina* (Aqueduct). 5 B.C.

10. SUSA (Italy). *Arch of Augustus*. 8 A.D.

It is doubtless due to mere carelessness that the date is given as 8 A.D. instead of 8 B.C. It is certainly not, as Graef thinks, a *Bau-Bogen*, but commemorates the submission of the Alpine tribes to Augustus.

11. FANO (Italy). *City Gate of Augustus*. 9 A.D.

12. ROME. *Arch of Dolabella*. 10 A.D.

13. S. CHAMAS (France). *2 Bridge Arches*. *Augustus* (?). 10(?) A.D.

This tentative date, 10 A.D., is rather too late in the reign of Augustus. The dates on the milestones of the road indicate a date between 5 and 10 B.C. There is no triumphal idea, as Graef imagines, connected with these and similar bridge arches.

14. MARTORELL (Spain). *Bridge Arch*. *Augustus* (?).

15. CAPARRA (Spain). *Janus Quadrifrons*. *Augustus* (?).

It seems, from the inscription, to be not a public road arch, but a memorial family arch.

16. MERIDA (Spain). *Triumphal Arch of Augustus* (?).

This arch not only can be assigned almost certainly to the reign of Augustus, but to its early part, before 20 B.C.

17. PHILIPPI. *Triumphal Arch of Augustus* (?).

Graef need not have expressed doubt whether this arch could be assigned to the reign of Augustus. Its simple and primitive type makes a later date impossible. It was probably extremely early; possibly a work of the triumvirs dedicated both to Marc Antony and Octavius.

18. SAINTES. *Arch of Tiberius*. 17(?) A.D.

There is no doubt of the date 17 A.D.

19. ORANGE. *Triumphal Arch of Tiberius*. 21(?) A.D.

I assign this arch to the early part of the reign of Augustus, for reasons to be given elsewhere.

20. CARPENTRAS. *Triumphal Arch of Tiberius*. 22(?) A.D.

There is no evidence for assigning this arch to Tiberius or to the year 22 A.D. It is probably earlier.

21. TRIER. *Porta Nigra*. 52 (?) A.D.

The fallacy of attributing, as Hübner did, this great military gate to the reign of Claudius has been demonstrated by recent excavations, which have disclosed graves, under its foundations, with coins of the second century. Promis's attribution to the age of Diocletian and Constantine is nearer the truth.

22. ROME. *Porta Maggiore*. 52 A.D.

23. SALONICA, I. *Triumphal Arch of Vespasian* (?).

I shall give elsewhere the reasons that have led me to assign this city gate to the time of Augustus. It is not a triumphal arch, but formed part of the city walls. See under THESSALONICA (anc. name) on my list.

24. ROME. *Triumphal Arch of Titus*. 82 A.D.

There is no reason for giving so exact a date as 82 A.D. We only know that it was built by Domitian some time after the death of Titus on September 13, 81 A.D. It may be considerably later than 82.

25. TIMGAD, I. *Triumphal Arch of Trajan*. 100 A.D.

The date 100 A.D., which is given by the inscription on the arch, is really concerned, not with the construction of the arch, but with the foundation of the colony. The arch may not have been completed until the reign of Marcus Aurelius, as was the case with the North Gate.

26. ALCANTARA. *Bridge Arch of Trajan*. 106 A.D.

27. BARA. *Honorary Arch*. 107 A.D.

28. BENEVENTO. *Arch of Trajan*. 114 A.D.

29. ANCONA. *Arch of Trajan*. 115 A.D.

30. MACTEUR, I. *Triumphal Arch of Trajan*. 117 A.D.

31. AIX-LES-BAINS. *Arch of Campanus. Trajan* (?).

The date suggested is wrong (Trajan), for this family funerary arch belongs to the early part of the reign of Augustus, or the period of the triumvirs, for reasons that will be given elsewhere.

32. VERONA. *Honorary Arch of the Gavii. Trajan* (?).

The period is not that of Trajan, but almost certainly that of Augustus, preferably the latter half of his reign.

33. POLA. *Honorary Arch of the Sergii. Trajan* (?).

The Sergius—tribune of the twenty-ninth legion, disbanded before 27 B.C. by Augustus—who is mentioned in the inscription of this arch enables us to date it in the early part of the reign of Augustus, instead of the time of Trajan, to which Graef conjecturally assigns it.

34. ATHENS. *Gate of Hadrian*. 120(?) A.D.

The approximate date is rather 125-126 or 129-130 than 120. Hadrian's main architectural undertakings at Athens were connected with the latter of these visits. But there is no proof that it was actually finished under Hadrian.

35. NICAËA, I and II. *City Gates of Hadrian*. 120(?) A.D.

The date 120 is too early. The earthquake which made the work of reconstruction necessary was perhaps later. The gates were unfinished at the time of Hadrian's death, in 138, for they are dedicated not to him, but to Antoninus Pius! We must suppose, from literary evidence, that Hadrian began the reconstruction of the city, but the memorial gates should be assigned to the reign of Antoninus Pius. It is strange that the dedicatory inscription should have been so misunderstood.

36. GAFFSA. *Triumphal Arch of Hadrian*. 120(?) A.D.

See under CAPSA (anc. name) on my list. It has been recently destroyed (*Archives des Missions*, XIII, 101). It was certainly not built as early as 120, but probably after Hadrian's visit to North Africa in 129.

37. DJERBASH. *Triumphal Arch of Hadrian*(?).

The real spelling is *Djerash*. See under GERASA (anc. name) on my list. If it was not built under Hadrian, it probably was under Antoninus Pius, judging from the inscriptions found on buildings in the city.

38. PATARA. *Triumphal Arch of Hadrian*(?).

The style seems later in the age of the Antonines than the time of Hadrian. It is not a triumphal but a civic arch.

39. PALMYRA. *Street Arch of Hadrian*(?).

40. PETRA, I and II. *Triumphal Arches of Hadrian*(?).

Both of these arches have now fallen.

41. LABANDJA. *Arch of Hadrian*(?).

42. AVITTA, I. *Triumphal Arch of Hadrian*. 137 A.D.

The date 137, while generally accepted, is really that of the founding of the *municipium* of Avitta. This arch, though erected to commemorate this event, was not dedicated until the reign of Antoninus Pius, as I shall show elsewhere; so that it can hardly be called an arch of Hadrian.

43. CAVAILLON. *Funerary Janus Arch*. *Hadrian*(?).

While there is no direct evidence, the balance of probabilities places this arch in the time of Augustus, rather than that of Hadrian.

44. SBEITLA, I. *Arch of Antoninus Pius*. 150 (?) A.D.

See under SUFETULA (anc. name) on my list. The date 150 (?) is too late. The third consulship of the inscription places it between 140 and 143.

45. TRIPOLIS. *Arch of Marcus Aurelius*. 163 A.D.

See under OEA (anc. name) on my list.

46. ROME. *Triumphal Arch of Marcus Aurelius*. 164 (?) A.D.

The so-called "Arco di Portogallo," destroyed in 1662, is here attributed to Marcus Aurelius. This is a double error: (1) the reliefs from this arch came originally from an arch of Hadrian, not of Marcus Aurelius (Helbig, *Coll. of Antiq.* I, p. 409); and (2) the "Arco di Portogallo" was a late *potpourri* of earlier elements, set up in the latest period of the Empire, so that the important deductions from its architecture drawn by Graef, on the supposition that it belonged to the time of Marcus Aurelius, are baseless. See both "*Arco di Portogallo*" (sixth century?) and *Arch of Hadrian* on my list of the arches of Rome.

47. MARCUNA. *Triumphal Arch of Marcus Aurelius*. 164 A.D.

See under VERECUNDA (anc. name) on my list. There were two or more arches here dedicated to Marcus Aurelius, — one in 163–164 and another in 172. Of these, Graef mentions only the former.

48. AVITTA, II. *Triumphal Arch of Marcus Aurelius*. 165 (?) A.D.

This arch was, in reality, dedicated to Lucius Verus, and was built between 161 and 168.

49. ABDELMELEK, I. *Triumphal Arch of Marcus Aurelius* (?).

See under UZAPPA (anc. name) on my list.

50. SALONICA, II. *Triumphal Arch of Marcus Aurelius*. 166 (?) A.D.

See under THESSALONICA (anc. name) on my list. Having been destroyed over a century ago, it does not rightly belong on Graef's list. In any case, it was not dedicated to Marcus Aurelius, but to Antoninus Pius between 146 and 160.

51. THASOS. *Triumphal Arch of Marcus Aurelius*. 166 (?) A.D.

52. LAMBÄSIS, I and II. *Triumphal Arches of Commodus*. 185 (?) A.D.

53. KASBAH, I. *Triumphal Arch of Commodus*. 185 (?) A.D.

See under THUBURBO (anc. name) on my list.

54. HAÏDRA, I. *Triumphal Arch of Septimius Severus*. 195 A.D.

See under AMMAEDARA (anc. name) on my list.

55. LAMBÄSIS, III. *Triumphal Arch of Septimius Severus*. 195 A.D.

56. ROME. *Janus [Quadrifrons] of Septimius Severus (?)*.

The Janus Quadrifrons in the Forum Boarium is recognized as built by Constantine and as being the *arcus Constantini* of the *notitia*. There are no grounds whatever for the attribution to Severus. See, on my list, *Janus Quadrifrons of Constantine*.

57. ROME. *Triumphal Arch of Septimius Severus*. 203 A.D.

58. ROME. *Honorary Arch of the Argentarii to Septimius Severus*. 204 A.D.

59. TEBESSA. *Honorary Arch of Septimius Severus*. 211-214.

See under THEVESTE (anc. name) on my list. It should be called an *arch of Caracalla*, not of Septimius Severus.

60. LAODICEA. *Street Arch of Septimius Severus (?)*.

Dr. Graef overlooked, apparently, the fact that Laodicea is merely the ancient name for Lattakieh, and was misled, by certain discrepancies between the descriptions of Pococke and De Vogüé, so as to make two arches out of one. His Nos. 60 and 61 describe a single arch at Lattakieh, the ancient LAODICEA, under which it is given on my list.

61. LATTAKIEH. *Street Arch of Septimius Severus (?)*.

See under previous number.

62. ZANFOUR, I. *Triumphal Arch of Caracalla*. 215 A.D.

See under ASSURAS (anc. name) on my list.

63. CONSTANTINE. *Triumphal Arch of Caracalla*. 215 A.D.

In the time of Caracalla the name of the city was CIRTA, under which head the arch is given in my list. The name was changed to CONSTANTINA by the emperor Constantine, and under this name its later arches are catalogued on my list.

64. DJEMILA. *Triumphal Arch of Caracalla*. 216 A.D.

See under CUICULUM (anc. name) on my list.

65. SPELLO, I. *Triumphal Arch of Macrinus*. 217 A.D.

There seems no real reason to connect the name of the emperor Macrinus with this arch, and no clue to its date.

66. ZANA, I. *Triumphal Arch of Macrinus*. 217 A.D.

See under DIANA (anc. name) on my list. Graef interchanges this arch with the other at Zana, describing one when he should the other. The arch of Macrinus has really *three* arcades: he says it has only one, * which is the case with the other arch. This second arch, which Graef places in his undated list, really belongs to the reign of Marcus Aurelius and the year 165.

67. THUGGA, I. *Triumphal Arch of Alexander Severus.* 230 (?) A.D.

68. MUSTIS, I. *Triumphal Arch of Gordian II.* 238 A.D.

69. LANGRES. *Triumphal Arch of Gordian II (?)*.

The style is too good for the period of the Gordians, to which a valueless tradition attributes it. It belongs rather to the time of Tiberius.

70. NICAËA, III and IV. *Triumphal Arches of Claudius II.* 240 (?) A.D.

Through an oversight, Graef has dated these arches 240 (?), whereas their date is 270 A.D., which he gives correctly on p. 1894.

71. ROME. *Honorary Arch of Gallienus.* 262 A.D.

72. VERONA. *Porta dei Borsari. Gallienus.* 265 A.D.

It is by no means certain that the inscription of Gallienus was not added to the city arch called "Porta dei Borsari," which may be considerably earlier.

73. VERONA. *Porta dei Leoni. Gallienus (?)*.

Instead of being possibly later than the time of Gallienus, as Graef suggests (p. 1878), the opinion is quite generally held that the "Porta dei Leoni" is earlier, in part if not wholly.

74. ROME. *Triumphal Arch of Aurelian.* 273 (?) A.D.

There are no records of such a triumphal arch. Graef's statement is based upon a reconstruction in Durand's *Parallèles* which seems quite fictitious. The only arches of Aurelian at Rome that are known were those of his city gates, which were extremely simple.

75. BESANÇON. *Triumphal Arch of Aurelian (?)*.

There is no evidence on which to attribute this arch to the reign of Aurelian. The style points to an earlier date.

76. SBEITLA, II. *Triumphal Arch of Diocletian.* 293 (?) A.D.

See under SUFETULA (anc. name) on my list.

77. ROME. *Triumphal Arch of Constantine.* 313 A.D.

The date of the dedication of the arch is 315, not 313, on the occasion of Constantine's *decennalia*, as the inscription clearly shows.

78. KASRINE. *Triumphal Arch of Constantine.*

See under CILLIUM (anc. name) on my list. The inscriptions on this arch show that it was built in the time of the Antonines (?), and merely restored by Constantine, probably in about 312, according to the editors of the *C.I.L.*, after the destructive raid of Maxentius in 311.

79. SALONICA, III. *Triumphal Arch of Constantine.*

See under THESSALONICA (anc. name) on my list.

80. REIMS. *Triumphal Arch of Julian (?)*.

It is merely a worthless local tradition that attributes this colossal structure to Julian. In the detailed statement of Ammianus Marcellinus of Julian's stay in the city, there is no hint of such a fact. On the contrary, the city walls (and presumably the gates) are spoken of as old and dilapidated. The artists of the time of Julian could not have built or carved an arch of this character. Its style is only slightly post-Antonine. The city originally had four arches of similar style; two beside the one here described existed in part until the eighteenth century.

B. ARCHES OF ENTIRELY UNCERTAIN DATE

*1. ABDELMELEK (N. Africa), II. *Gate Arch*.

See under UZAPPA (anc. name) on my list. It can be dated from the reign of Caracalla.

*2. ABUAB (N. Africa). *4 Triumphal Arches*.

See under SERESSITUM (anc. name) on my list. Two of the four gates were destroyed down to their basement, long since. The finer of the two remaining seems to have been built under Caracalla, to whose reign the rest can be referred with probability.

*3. ANTINOË (Egypt). *Triumphal Arch*.

Graef merely cites Donaldson's (*Arch. Num.*) passing reference to this arch and is apparently unaware that it is based on the text and plates of Antinoë in the *Description de l'Égypte*, which constitute probably the most thorough study of an arch ever made and partly console us for the subsequent ruin of this remarkable monument. Its date is apparently the late part of the reign of Hadrian, after 130 A.D.

*4. ANNOUNA (N. Africa). *3 Arches (1 Triumphal, 2 Gates)*.

See under THIBILIS (anc. name) on my list. One of these arches has an inscription of Septimius Severus, Caracalla, and Geta; the three mentioned by Graef, as well as a fourth, should all be attributed to the time of Severus, and removed from the category of undated arches.

*5. APHRODISIUM (N. Africa). *Triumphal Arch*.

This is not a triumphal but a nymphaeum arch.

*6. AUTUN (France). *2 City Gates*.*7. BOUGIE (N. Africa). *City Gate*.

See under SALDAE (anc. name) on my list.

*8. CABANES (Spain). *Triumphal Arch*.

Graef himself assigns this arch, on p. 1888, by inference, to the early part of the reign of Augustus, which may be accepted.

*9. CARSOLI (Italy). *Triumphal Arch.*

*10. CELENDERIS (Asia Minor). *Funerary Arch.*

*11. EPHEBUS (Asia Minor). *Triumphal Arch.*

The date can now be given; it belongs to Hadrian.

*12. HAÏDRA (N. Africa), II. *Honorary Arch.*

See under AMMAEDARA (anc. name) on my list.

*13. KASBAH (N. Africa). *3 Arches* (1 Triumphal, 2 Gates).

Also spelled Kasbat. See THUBURBO MAIUS (anc. name) on my list. The period of these arches, though uncertain to some extent, is probably limited to the time between Marcus Aurelius and Commodus, when the city was built and received the rank of colony (*C.I.L.* VIII, 843-846 and 12366). The Southern Gate was apparently dedicated to Commodus.

*14. LAMBÄSIS (N. Africa), IV. *City Gate.*

*15. MACTEUR (N. Africa), II. *Triumphal Arch.*

See under MACTARIS (anc. name) on my list. For reasons given elsewhere this arch can be assigned to the time of Marcus Aurelius and Lucius Verus or, at latest, to the reign of Commodus.

*16. MEDEÏNA (N. Africa). *Triumphal Arch.*

See under ALTHIBURUS (anc. name) on my list. It should be removed from this category, and placed under arches that can be approximately dated, for its inscription refers it to one of the Early Antonines.

*17. MUSTIS (N. Africa), II. *Triumphal Arch.*

*18. POMPEII. *2 Triumphal Arches.*

Graef's neglect of the arches and gates of Pompeii is strange. His only reference to them is: "Die Bögen von . . . Pompeji sind derart zerstört, dass über ihre frühere Gestalt gewisses nicht festgestellt werden kann." This is quite incorrect. Enough remains of the arches on either side of the temple of Jupiter to allow of partial reconstruction. Instead of only *two* monumental arches, we know of *five*, not counting the city gates. Nor is there much doubt or possible elasticity in the dates of these works, which should be transferred to the list of datable arches.

*19. SCHAUWASCH (N. Africa). *Triumphal Arch.*

See under SUA (anc. name) on my list. Its date can be approximately fixed as not earlier than Caracalla, from the expression *arcus triumphalis* used in its inscription.

- *20. SPELLO (Italy). 2 *City Gates*.

- *21. SUKERA (N. Africa). *Triumphal Arch*.

This name is also given as [*Hammam*] *Soukera* and *Zouakra*. See under THIGIBBA (anc. name) on my list. Its close resemblance to the arches of Mactaris and Uzappa refers it to the early Antonines.

- *22. TIMGAD (N. Africa), II and III. *City Gates*.

See under THAMUGADI (anc. name) on my list. The date of these two gates is known, from their inscriptions, to be that of the Antonines. Several other arches and gates beside these existed at Thamugadi; see my list.

- *23. TUGGA (N. Africa), II and III. *City Gates*.

See under THUGGA in my list. The probable date of these arches is the first half of the third century, between Septimius Severus and Severus Alexander.

- *24. THUBURSICUM (N. Africa). 2 *Arches* (1 *Triumphal*, 1 *Gate*).

These two arches probably belong to the time of Trajan or, at latest, to Hadrian.

- *25. TUNGA (N. Africa). *Honorary Arch*.

See under THIGNICA (anc. name) on my list. The date can be stated with certainty to be the age of the Antonines, probably the reigns of Antoninus Pius or Marcus Aurelius.

- *26. VIENNE (France). *Funerary Arch*.

- *27. ZANA (N. Africa). *Triumphal Arch*.

See under DIANA (anc. name) on my list. Graef makes two errors in connection with this arch. (1) He confuses it with the other arch in the same place dedicated to Macrinus. It is the latter arch which is triple: this arch is single. (2) This arch is really dated in the year 165 A.D., when it was dedicated to Marcus Aurelius and Lucius Verus. See *C.I.L.* VIII, 4591-4592. Cf. under No. 66.

- *28. ZANFOUR (N. Africa), II and III. *City Gates*.

See under ASSURAS (anc. name) on my list. It may be granted that these gates were contemporary with that of Septimius Severus and Caracalla.

Only a few words of explanation will be required to introduce the reconstructed list with its additions.

MY LIST

On the following list the sign † indicates that the arch no longer exists. But in a number of such instances the foundations, architectural fragments, or sculptures remain to indicate the style. In a few cases this sign is not used, though the arch is destroyed. For example, in the arch of the Fabii at Rome, of which enough remains to show span of arch and style. Further investigation may show that the sign † should be added to a few more arches, *e.g.* in North Africa.

The letter G indicates that the arch is one known to Graef and included on his list. This may not be always obvious, because, as already observed, I have often substituted the ancient name for his use of the modern name of the locality. However, all such variations of name are mentioned in my analysis of his list.

The purposes for which arches were erected seem to me different from what is commonly supposed. Even Dr. Graef saw that not all could be called "triumphal," but he still thought that *two-thirds* of the whole number were built to celebrate some triumph, while the rest were to be divided into street arches, honorary arches, and building arches. Unless I am greatly mistaken, so few of the arches were actually built to celebrate a triumph that *one-twentieth* of the whole would be nearer the proportion than two-thirds. All such questions, however, must be omitted from this paper.

In designating the arches, for the present, as "city gates," "memorial arches," "triumphal arches," "road arches," etc., I have purposely omitted the use of a new and comprehensive term which I shall apply to a large number of arches when the list appears in final book form, because the use of this term requires a long preliminary justification, which goes to the basis of the real meaning of the majority of such monuments. In this, as well as in everything else relating to history, criticism, and classification, I cannot anticipate.

There may be some scepticism as to the reality of the con-

nection between the pre-Augustan arches — the *Janus*-arches and *Fornix*-arches of the Republic — and those of the Empire, and it may be thought irrelevant to place them at the head of the list. We are familiar with this point of view, which makes the various forms of the memorial arch spring full-armed into being in the early years of Augustus, when we see the single arch, the two-arched gate, the triple arch, the Janus quadrifrons, all in use. For the benefit of those who wish to use this chronological table it may be said that there is no basis in the difference of name for believing in a fundamental difference in form. If the terms *ianus* and *fornix* were used in the republican period to designate the arches of the Forum, the Capitol, and temple entrances, it was because of philological as well as artistic changes that they were largely superseded by the term *arcus* in the Augustan Age. Romans called the arch of the Fabii indifferently *arcus* and *fornix*. The arch at which the great military Roman road in the south of Spain began was called, in Augustan and later inscriptions, *Ianus Augusti*, and Domitian's arches were termed both *iani* and *arcus*. The Janus Quadrifrons of Constantine is called *arcus* in the *Notitia*. There is no reason to doubt the substantial bond of historic development that united the arches of the Rome of the Kings with those of the cities of the Empire. As side-lights upon the question of origin I have purposely included the triumphal gate of 318 B.C. in the Forum at Athens and the triumphal city gate of Xanthus in Lycia, of somewhat later Hellenistic date, surmounted by trophies. Further explanation would swell this paper beyond bounds.¹

¹ In a few cases the same arch is enumerated twice on the list when extensively restored or rebuilt, e.g. Fano (Nos. 108 and 368), Cillium (Nos. 277 and 362), and the Janus Quirinus at Rome (Nos. 2 and 84).

I. *Datable Arches (exactly or approximately)*

No.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE	
1	Rome, Janus Curvatus = Tigillum Sororium	Italy	Kingly Period ?	B.C.	†
2	Rome, Janus Quirinus = Geminus = Bifrons	"	" ?		†
3	Rome, Janus ad portam Carmentalem	"	" ?		†
4	Athens, Triumphal Gate of Agora	Greece		318	†
5	Antioch, Tetracylon of Seleucus (?)	Syria	Hellenistic	c. 300	†
6	Xanthus, Triumphal Gate	Asia Minor	"	?	†
7	Rome, Janus of Duilius (reconst. No. 3)	Rome	Repub. Period	c. 260	†
8	Volterra, City Gate, "Porta dell' Arco"	Italy	Etruscan	c. 3d century	
9	Volterra, City Gate, "Porta di Diana"	"	"	c. 3d century	
10	Falerii, City Gate, "Porta di Giove"	"	"	c. 240	
11	Falerii, City Gate, "Porta di Bove"	"	"	c. 240	
12	Paestum, City Gate, "Porta della Sirena"	"	Hellenistic	?	
13	Rome, Porta Triumphalis	"	Repub. Period	?	†
14	Rome, Arch at Temple of Fortune	"	"	196	†
15	Rome, Arch at Temple of Matuta	"	"	196	†
16	Rome, Arch at Circus Maximus	"	"	196	†
17	Rome, Arch on Capitol	"	"	190	†
18-20	Sinuessa, 3 Arches (Janus) in Forum	"	"	174	†
21	Rome, Arch of Calpurnii on Capitol	"	"	before 129	†
22	Pompeii, City Gate, "Porta di Nola"	"	"	c. 2d century	
23-28	Pompeii, all other gates except Herculaneum Gate	"	"	?	
29	Cales, Janus Arch	"	Repub. Period	?	†

No.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE	
30	Privernum, City Arch	Italy	Repub. Period ?	B.C.	G
31	Perugia, "Arco d' Augusto" and other City Gates	"	Etruscan and Aug.	?	
32	Alba, Arch of Jupiter Latiaris	"	Repub. Period ?	?	†
33	Rome, Arch of the Fabii	"	"	121	
34	Rome, 2 Janus Arches, Vicus Tuscus	"	"	?	Imp. Rec.
35	Rome, Janus, Vicus Jugarius	"	"	?	"
	(Nos. 34 and 35 were rebuilt in Imperial Period)				
36	Syracuse, Honorary Arch of Verres	Sicily	"	71-72	†
37	Assisi, City Fornix Arch	Italy	"	?	†
38	Pompeii, Northwest Arch of Forum	"	"	after 80	
39	Pompeii, Northeast Arch of Forum	"	"	after 80	†
	IMPERIAL AGE				
40	Philippi, Arch of Anthony and Octavius	Greece	Augustus	c. 41	G
41	S. Remy, Arch of the Julii	France	"	c. 40	G
42	Rome, Arch for Sextus Pompey and Lepidus	Italy	"	c. 36	†
43	Corinth, Arch of Agora	Greece	"	?	
44	Pola, Arch of the Sergii	Dalmatia	"	c. 33-27	G
45	Pola, City Gate, "Porta Gemina"	"	"	c. 33	
46	Pola, City Gate, "Porta Herculeia"	"	"	c. 33	
47	Pola, City Gate, "Porta Minervia"	"	"	c. 33	†
48	Pola, Forum or Capitol Arch	"	"	c. 33	
49	Triest, City Gate	"	"	c. 33	†
50	Triest, City Arch, "Arco di Riccardo"	"	" ?	c. 33	G
51	Fiume, City Arch	"	" ?	?	

No.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE	
52	Zara, Arch of Bassus	Dalmatia	Augustus ?	B.C.	
53	Zara, Arch of Forum	"	"	?	
54	Zara, City Gate	"	"	?	†
55	Laodicea, Triumphal Tetracylon	Syria	"	c. 30	†
56	Rome, Triumphal Arch for Actium	Italy	"	29	†
57	Brindisi, Triumphal Arch for Actium	"	"	29	†
58	Falerio, Forum Arch	"	"	after 29 ?	†
59	Patras, Forum Arch	Greece	"	after 29	†
60	Fréjus, " Porte Dorée "	France	"	before 27 ?	
61	Fréjus, " Porte Romaine "	"	"	before 27 ?	†
62	Tarragona, City Arch	"	"	before 27 ?	†
63	Rome, Arch to Julius Caesar on Palatine	Spain	"	c. 27-25 ?	†
64	Rome, Arch at Pompey's Theatre	Italy	"	c. 28	†
65	Rimini, Road Arch	"	"	?	
66	Rome, Road Arch at Mulvian Bridge	"	"	27	G
67	Aosta, Memorial Arch	"	"	27	
68	Aosta, City Gate, " Porta Praetoria "	"	"	25	G
69	Aosta, City Gate " Porta Decumana "	"	"	25	
70	Merida, Triumphal Arch	Spain	"	25	
71	Merida, City Gate	"	"	c. 25	G
72	Turin, City Gate " Porta Palatina "	Italy	"	c. 25	
73	Orange, Triumphal Arch	France	"	c. 25	G
74	Carpentras, Triumphal Arch	"	"	c. 25	G
75	Avignon, Triumphal Arch	"	"		
76	Cavaillon, Arch of Fronto	"	"		†

NO.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE		
77	Aix-les-Bains, Arch of the Campani	France	Augustus ?	B.C.		G
78	Thessalonica, City Gate, "Vardar Gate"	Greece	" ?	?		G
79	Pompeii, South Arch of Forum	Italy	"	c. 20 ?	†	
80	Rome, Arch for Parthian Standards	"	" ?	19		
81	Antioch (near), Road Arch, "Bab el Hawâ"	Syria	"	?	†	
82	Sebaste, Tetrastylon of Herod	"	"	c. 20	†	
83	Berytus, Aqueduct Arch of Agrippa (?)	"	"	?	†	
84	Rome, Janus Quirinus (rebuilt)	Italy	"	16	†	
85	Baetis (River), Road Arch, "Janus Augusti"	Spain	"	?		
86	Cabanes, City Arch	"	" ?	?		G
87	Martorelli, Bridge Arch	"	"	?		G
88	Caparra, Arch of Maecr	"	"	?	†	G
89	Italian Bridge Road Arches (on coins)	Italy	"	?		G
90	Pompeii, Herculaneum Gate	"	"	?		
91	Nîmes, City Gate, "Porte d'Auguste"	France	"	16-15		G
92	Nîmes, City Gate, "Porte de France"	"	"	16-15	†	
93	Vienne, City Gate	"	"	16-15	†	
94	Arles, Triumphal Arch	"	"	?		G
95	Besançon, Triumphal Arch, "Porte Noire"	"	"	?		G
96	Terracina, Arch of Forum	Italy	"	?	†	
97	Rome, Arch at Aemilian Bridge	"	"	12	†	
98	Rome, Arch of Drusus	"	"	9		
99	Susa, Arch of Cottius	"	"	8		G
100	Susa, City Gate	"	"	c. 8 ?		
101	S. Chamas, Bridge Arches	France	"	c. 7		G
102	Rome, Arch of Aqua Iulia (Porta Tiburtina)	Italy	"	5		G

No.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE	
103	Rome, Arch of Forum of Augustus (A. dei Pantani)	Italy	Augustus	A.D.	
104	Athens, Gate of New Agora	Greece	"	2	
105	Rome, Arch of Lentulus	Italy	"	2	†
106	Pisa, Arch of Caius Caesar	"	"	4	†
107	Pavia, Imperial Family Arch	"	"	7-8	†
108	Fano, City Gate	"	"	9	
109	? Arch of Tiberius	Pannonia	"	9	†
110	? Arch of Germanicus	"	"	9	†
111	Rome, Arch of Dolabella	Italy	"	10	
112	Pozzuoli, Janus Quadrifrons of Harbor	"	"	?	†
113	Beneventum, Street Arch	"	"	?	
114	Canosa, "Arch of Varro"	"	"	?	
115	Carsoli, Forum Arch	"	"	?	†
116-117	Ostia, 2 Forum Arches	"	"	?	†
118	Apt, Memorial Arch	France	"	?	†
119	Geneva, Arch of Verecundus	"	"	?	†
120	Cilician Gates, Road Arch	Asia Minor	"	?	
121	Verona, Arch of the Gavii	Italy	Tiberius	?	
122	Rome, Janus at Theatre of Marcellus	Italy	"	c. 15	†
123	Rome, Triumphal Arch for Standards of Varus	"	"	16	†
124	Saintes, Bridge Arch	France	"	17	
125	Rome, Arch of Drusus (Forum of Augustus)	Italy	"	c. 19	†
126	Rome, Arch of Germanicus (Forum of Augustus)	"	"	c. 19	†
127	Rhine (near), Arch of Germanicus [Mainz?]	Germany	"	c. 19	†
128	Mt. Amanus, Arch of Germanicus	Syria	"	c. 19	

No.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE	
129	Rome, Arch of Germanicus and Drusus	Italy	Tiberius	A.D. 19-23	
130	Spoleto, Arch of Germanicus and Drusus	"	"	c. 23	G
131	Pompeii, North Arch of Forum	"	"	?	G?
132	Antioch, East City Gate	Syria	"	?	
133-134	Antioch, 2 Tetrarchy of Colonnaded Avenues	"	"	?	
135	Langres, City Gate	France	"	?	
136	Rome, Arch of Livia (voted, not built)	Italy	"	?	
137	Pompeii, Aqueduct Arch (V. di Merc.)	"	Caligula?	29	G
138	Rome, Arch of Tiberius at Theatre of Pompey	"	Claudius	?	G?
139	Ravenna, Memorial Arch, "Porta Aurea"	"	"	41	
140	Ostia, Harbor Arch	"	"	43	
141	Rome, Aqueduct Arch (A. Virgo)	"	"	46?	
142	Attalia, City Gate, "Perge Gate"	"	"	46	
143	Perge, South City Gate	Asia Minor	"	50	
144	Rome, Arch for Conquest of Britain	"	"	?	
145	Boulogne, Arch for Conquest of Britain	Italy	"	51-52	
146	Cyzicus, Arch for Conquest of Britain	France	"	c. 51	
147	Rome, Aqueduct Arch, "Porta Maggiore"	Asia Minor	"	c. 51	
148	Rome, Arch, "Ad Isis"	Italy	?	52	
149-150	Rome, 2 Triumphal Arches on Capitol	"	Nero	?	
151	Olympia, Entrance Arch of Altis	"	"	c. 66	
152	Rome, Neronian Aqueduct, Street Arcades (3 or more)	Greece	"	c. 67	
153	Rome, Arch for Remission of Tax	Italy	Galba	c. 62	
154	Xanthus, Arch of Vespasian	"	Vespasian	69	
155	Antioch, Gate of the Cherubim	Asia Minor	"	c. 71	
		Syria	"	c. 71	?

No.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE	
156	Antioch, West Triumphal Gate, "Porta Aurea" . .	Syria	Vespasian ?	A.D. ?	†
157	Rome, Arch of Forum Pacis	Italy	"	75	†
158	Ephesus, Magnesian Gate	Asia Minor	"	?	
159	Rome, Arch of Vespasian and Titus in Circus Maximus	Italy	Titus	81	†
160	Rome, Arch of Titus in Forum	"	Domitian	82 ?	
161	Rome, Germanic Arch	"	"	81	†
162	Rome, Dacian Arch, "Porta Triumphalis"	"	"	89-91	†
163	Rome, Sarnatian Arch	"	"	93-95	†
164	Rome, Janus Quadrifrons in Forum Transitorium .	"	"	c. 95	†
165	Laodicea, Memorial City Gate	Asia Minor	"	?	
166	Rome, Arch of Forum Transitorium	"	Nerva	97	†
167	Rome, Arch of Circus Maximus	"	Trajan	98-104	†
168	Rome, Germanic Arch (?)	"	"	100	†
169-170	Danube, 2 Arches of Bridge	Moesia	"	101-105	†
171-172	Nicopolis, City Gates	"	"	c. 103	†
173-174	Marcianopolis, City Gates	"	"	?	†
175	Ad Maiores, Gates of Citadel	North Africa	"	105	
176	Ad Maiores, Arch of Citadel	"	"	105	
177	Alcantara, Bridge Arch	Spain	"	105	†
178	Luna, Memorial Arch (?)	Italy	"	105	
179	Bara, Arch of Licinius Sura	Spain	"	107	†
180	Rome, Dacian Arch	Italy	"	107 ?	†
181	Rome, Entrance to Forum	"	"	107-113	†
182	Beneventum, Memorial Arch	Italy	"	114	
183-184	Ancona, Harbor Arches	"	"	115 (1)	G (1)

NO.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE	
185	Antioch, Triumphal Gate	Syria	Trajan	A.D. c. 115	†
186	Miletus, Triumphal Gate	Asia Minor	"	?	†
187	Tomi, City Gates	Moesia	"	116-117	
188	Mactaris, City Memorial Arch	North Africa	"	117	
189	Thamugadi, City Memorial Arch	"	"	?	
190	Edessa, Tetracylon	Syria	"	?	
191	Edessa, Triumphal Gate	"	"	?	†
192-193	Thubursicum, 2 City Gates	North Africa	"	?	†
194	Porto, Port Arch, "Arco di Nostra Donna"	Italy	"	?	
195	Burnum, Camp Arch (?)	Dalmatia	Hadrian	118?	
196	Rome, Memorial Arch	Italy	"	c. 119	†
197	Leptis Magna, Aqueduct Arch	North Africa	"	119-121	
198	Isaura, South City Gate	Asia Minor	"	c. 125-130	
199	Isaura, Forum Arch	"	"	c. 125-130	
200	Bizya, City Gate	Thrace	"	?	†
201	Attalia, Memorial Arch	Asia Minor	"	c. 125-130	
202	Athens, City Arch	Greece	"	c. 125-130	
203	Capsa, City Gate	North Africa	"	c. 128	†
204	Zama (near), Road Arch	"	"	c. 128	
205	Quiza, City Gate	"	"	128	
206	Antinoë, Memorial Gate	Egypt	"	c. 130	†
207	Jerusalem, East City Gate	Palestine	"	c. 130-136	
208	Jerusalem, Golden Gate	"	"	c. 130-136	
209	Jerusalem, Forum Arch	"	"	c. 130-136	†
210	Rome, Arch for Jewish Triumph	Italy	"	135	†

No.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE	
				A.D.	
211	Palmyra, Street Arch	Syria	Hadrian ?	?	G
212	Palmyra, Tetracylon	"	" ?	?	G
213	Patara, City Gate	Asia Minor	" ?	?	G
214-215	Petra, 2 Memorial Arches	Arabia	" ?	?	G
216-217	Ephesus, 2 Forum Arches	Asia Minor	" ?	?	G (1)
218	Cretopolis, City Gate	"	" ?	?	
219	Marathon, Gate of Herodes Atticus	Greece	" ?	?	
220	Labandja, Bridge Arch	Asia Minor	" ?	?	G
221	Terracina, Entrance Arch of Port	Italy	" ?	?	
222-223	Nicaea, East and North City Gates	Asia Minor	Antoninus Plus	?	G
224	Avitta, Arch of Hadrian	North Africa	" ?	?	G
225	Corinth, Arch of Temenos at Isthmus	Greece	" ?	?	
226	Athens, Arch of Hadrian's Aqueduct	"	" ?	?	
227	Sufetula, Arch of Temenos	North Africa	" ?	139-140	G
228	Rome, Arch of Faustina (?)	Italy	" ?	140-143	
229	Pozzuoli, Arch at end Mole	"	" ?	c. 141	
230	Gerasa, Propylaeum Arch of Temple	Syria	" ?	139-140	
231	Gerasa, Triumphal Arch	"	" ?	?	G
232	Gerasa, Tetracylon I.	"	" ?	?	
233	Gerasa, Tetracylon II	"	" ?	?	
234	Gerasa, South City Gate	"	" ?	?	
235	Tuccabor, Arch of Celsus	North Africa	" ?	?	
236	Thessalonica, Memorial Arch	Greece	" ?	146-160	G
237	Thamugadi, " Arcus Pantheus "	North Africa	" ?	?	
238	Thamugadi, Market Gate	"	" ?	?	

No.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE	
239	Thamugadi, Forum Arch II	North Africa	Antoninus Pius ?	A.D. ?	
240	Thamugadi, East City Gate	"	" ?	?	†
241	Thamugadi, North City Gate	"	"	149	†
242	Rome, "Arcus Pietatis" (Antoninus Pius)	Italy	Marc. Aurelius ?	?	
243	Avitta, Arch of Verus	North Africa	"	161-168	
244	Oea, Janus Quadrifrons	"	"	163	G
245	Diana, Memorial Arch	"	"	165	G
246	Thasos, Memorial Arch	Greece	"	166 ?	G
247	Rome, Triumphal Arch of Lucius Verus	Italy	"	166	G
248	Verecunda, Memorial Gate	North Africa	"	164-167	
249	Volubilis, Memorial Gate	"	"	167	G
250	Thamugadi, West City Gate	"	"	166-169	
251	Thamugadi, North Cardo Gate	"	"	?	G
252	Thamugadi, South City Gate	"	"	?	
253-254	Saltus Massipianus, 2 City Gates	"	"	167-177	
255	Philippopolis (Thrace), City Gate	Greece	"	172	†
256	Verecunda, Memorial Gate	North Africa	"	172	
257	Rome, Triumphal Arch near Capitol	Italy	"	176	†
258	Sua, Temple Arch	North Africa	"	?	
259	Uzappa, Memorial Gate	"	"	?	
260	Mactaris, Memorial Gate	"	"	?	G
261	Rome, Arch in Campus Martius (A. de Tosetis)	Italy	"	?	G
262	Thurburbo Malus, City Gate	North Africa	Commodus	185 ?	
263-265	Thurburbo Maius, 3 other City Gates	"	"	?	
266	Assuras (near), Arch at El Ust	"	"	188	G

No.	Place and Name of Arch	Country	Ruler	Date	
267-268	Lamæsis, 2 Memorial Arches	North Africa	Commodus	A.D. ?	G
269	Hierapolis, Forum Arch	Asia Minor	"	?	G
270	Althiburus, Memorial Gate	North Africa	Early Antonines		G
271	Ammaedara, Memorial Gate	"	"		
272	Damascus, Forum or Temenos Entrance	Syria	"		
273	Damascus, East City Gate	"	"		
274	Gigthis, Forum Arch	North Africa	"		
275	Uzappa, East Arch, Upper City	"	"		
276	Mylasa, Memorial Gate	Asia Minor	"		
277	Cillium, City Arch (see 362)	North Africa	"		G
278	Philippopolis, Tetracylon	Syria	"		
279	Philippopolis, East City Gate	"	"		
280-281	Philippopolis, 2 South City Gates	"	"		
282	Philippopolis, North City Gate	"	"		
283	Philippopolis, West City Gate	"	"		
284-285	Siâh, 2 Temenos Arches of Temple	"	"		
286	Thigibba, Memorial Gate	North Africa	"		G
287	Thignica, Memorial Gate	"	"		G
288	Syrian Gates, Triumphal Arch	Syria	"		
289	Ammaedara, Memorial Arch	North Africa	Septimius Severus?	194-198	G
290	Lamæsis, Memorial Arch	"	"	195	G
291	Laodicea, Tetracylon	Syria	"	?	G
292	Volubilis, Memorial Gate	North Africa	"	?	
293	Sidi Amara, Forum Arch	"	"	?	
294	Arsacal, Memorial Gate	"	"	197	
295	Constantinople, Arch of Porticoes		"	c. 200	†

No.	Place and Name of Arch	Country	Ruler	Date	
296	Constantinople, Arch of the Hippodrome		Septimius Severus?	A.D. ?	†
297	Constantinople, Gates of Eugenius and Urbicius		"	" ?	†
298	Rome, Triumphal Arch in Forum	Italy	"	203	
299	Rome, Arch of Argentarii	"	"	204	
300-301	Rome, 2 Bridge Arches	"	"	208	†
302	Vaga, City Gate	North Africa	"	209	
303-305	Thibilis, 3 City Gates	"	"	" ?	
306	Theveste, Janus Quadrifrons	"	"	211-214	G
307	Theveste, North City Gate	"	Caracalla ?	" ?	G
308	Vazi Sarra, Arch of Temenos of Mercury	"	"	212	
309-310	Holzhausen, 2 Gates of Camp	Germany	"	213	
311	Assuras, Memorial Gate	North Africa	"	215	
312-313	Assuras, 2 City Gates	"	"	" ?	G
314	Cirta, Memorial Arch	"	"	215	G
315	Cuiculum, Memorial Gate	"	"	216	G
316	Sua, Memorial Arch	"	"	" ?	G
317-318	Seressitum, 2 City Gates	"	"	" ?	G
319-320	Seressitum, 2 City Gates	"	"	" ?	G
321	Uzappa, Memorial Gate	"	"	" ?	G
322-323	Thugga, 2 City Gates	"	Later Antonines	" ?	G
324	Reims, Memorial Arch, "Porte de Mars"	France	"	" ?	G
325	Reims, Memorial Arch, "Porte Bazée"	"	"	" ?	G
326	Reims, Memorial Arch, "Porte Ceres"	"	"	" ?	G
327	Turin, Triumphal Arch (?)	Italy	"	" ?	G
328	Diana, Memorial Arch	North Africa	Macrinus	217	
329	Rome, Arch of Temenos of Jupiter	Italy	Alex. Severus		†

No.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE A.D.	
330	Thugga, City Gate	North Africa	Alex. Severus		G
331-332	Thiburscum Bure, North and East Gates	"	"		G
333	Mustis, Memorial Gate	"	Gordian II	238	
334	Rome, Triumphal Arch of Praetorian Camp	Italy	Gordian III	238	
335	Bostra, Memorial Street Arch	Arabia	Philip	244-249	
336	Bostra, West City Gate	"	"		
337	Bostra, East City Gate	"	"		
338	Bostra, Street Arch	"	"		
339	Perugia, City Gate, "Porta Marzia" (restored)	Italy	Trebon. Gallus	251-253	G
340	Mopsuestia (near), Arch of Bridge over Pyramus	Asia Minor	"		
341	Antioch (near), Arch of Bridge over Maeander	"	"		
342	Doclea, City Gate	Dalmatia	Gallienus	257-260	
343	Antioch, Tetracylon of Colonnade	Syria	"	257-260	
344	? Triumphal Arch (on Coin)	France	Postumus	257-260	
345	Rome, Honorary Arch	Italy	Gallienus	262	G
346	Verona, Memorial Gate, "Porta dei Borsari" (restored)	"	"	265	G
347	Verona, Memorial Gate, "Porta de' Leoni" (restored)	"	"		G
348	Parium, Memorial Gate	Asia Minor	"		
349	Nicaea, West City Gate, "Lake Gate"	"	Claudius II	270	
350	Nicaea, South City Gate, "Yeni Cheher"	"	"	270	
351	Rome, City Gates	Italy	Aurelian	c. 271	G
352	Sufetula, Memorial Gate	North Africa	Diocletian		G
353	Grenoble, City Gate, "Porte Romaine"	France	"		G
354	Grenoble, City Gate, "Porte de Vienne"	"	"		
355	Rome, Triumphal Arch, "Arcus Novus"	Italy	"	303	
356	Lesbos, Tetratype Arch	Greece	"		

No.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE	
357	Macomades, Memorial Gate	North Africa	Diocletian	A.D.	
358	Mididi, Memorial Gate	"	"	303	
359	Thugga (near), Road Arch	"	"	?	
360	Spalato, "Porta Aurea" and other Palace Gates	Dalmatia	"	305	
361	Rome, Arch of Circus of Maxentius	Italy	Maxentius	c. 305	
362	Rome, Janus Quadrifrons	"	Constantine	309-311	†
363	Cillium, City Arch (restored)	North Africa	"	c. 312	
364	Rome, Triumphal Arch	Italy	"	312	
365	Constantina, Triumphal Arch	North Africa	"	315	
366	Thessalonica, Triumphal Arch	Greece	"	c. 315	†
367	Treves, City Gate, "Porta Nigra"	Germany	"	?	G
368	Tomi (near), Triumphal Arch at Tropaeum Traiani	Moesia	"	?	G
369	Fano, Gate of Augustus (restored)	Italy	"	316	
370	Arles, Triumphal Arch	France	"	?	G
371	Constantinople, Triumphal Gate, "Porta Aurea Palatia"		"	?	G
372	Constantinople, 2 Arches of Forum of Constantine		"	c. 330	†
373	Constantinople, Miliarium Aureum		"	c. 330	†
374	Constantinople, Gate of Atalus		"	c. 330	†
375	Constantinople, Gate of Anasiris		"	c. 330	†
376	Salona, City Gate, "Porta Caesarea"	Dalmatia	Constantinus	c. 330	†
377	Albenga, Memorial City Gate	Italy	"	?	†
378	Aphrodisias, 4 City Gates	Asia Minor	"	?	
379	Constantina, Arch of Faustus	North Africa	"	351	
380	Constantina, Tetracylon of Avitianus	"	"	?	
381	Anazarbus, 4 City Gates	Asia Minor	?	?	
382	Anazarbus, Forum Arch	"	?	4th century	†

No.	PLACE AND NAME OF ARCH	COUNTRY	RULER	DATE A.D.		
383	Olba, Forum Arch	Asia Minor	?	4th century ?		G
384	Thigibba, Memorial Arch	North Africa	Valentinian	?	†	
385	Macomades, Arch of Valentinian and Valens	"	Valent. and Val.			
386	Rome, Arch of Valentinian and Valens at Ponte Sisto	Italy	"			
387	Amida, City Gates of Valentinian, Gratian, and Valens	Syria	V., G., and V.	375-378		
388	Theveste (near), Road Arch of Valentinian, Gratian, and Valens	North Africa	"	375-378		
389	Ghardimaû, Arch of Gratian, Valentinian, and Theodosius	"	G., V., and T.	379-383		
390	Membressa, Arch of Gratian, Valentinian, and Theodosius	"	"	379-383	†	
391	Rome, Arch near Aelian Bridge	Italy	"	382	†	
392	Constantinople, Triumphal Gate, "Porta Aurea"		Theodosius	c. 388	†	
393	Constantinople, 2 Forum Arches		"	?	†	
394	Constantinople, Tetracylon		"	?	†	
395	Djuwanilyeh, Tetracylon Mausoleum	Syria	Arcadius	398		
396	Rome, Triumphal Arch of Honorius	Italy	Arcad. and Hon.	405	†	
397-399	Rome, Gates of Honorius: "Praenestina," "Portuensis," "Tiburtina," &c.	"	"	402		
400	Salona, City Gate, "Porta Andetria"	Dalmatia	Theodosius II	425		
401-405	Constantinople, Gates of Charisius, Rhegium, Buconleon (?), S. Emilianus, East Gate (?)		"	447	†	G
406	Rome, "Arco di Portogallo"	Italy	Justinian ?	?		
407	Der Semân, Monastery Arch	Syria	" ?	6th century		
408	Carthage, Memorial City Gate	Spain	Mauricius	589	†	

II. Undatable Arches

No.	PLACE AND NAME OF ARCH	COUNTRY		
409	Akkale (near), City (?) Arch . . .	Cilicia		
410	Althiburus, Capitol Arch	North Africa		
411	Apamea, North City Gate	Syria		
412	Aphrodisium, Nymphaeum Arch . .	North Africa		G
413-414	Apisa, 2 Gates	"		
415	Aquino, City Arch	Italy		
416	Aspendos, Forum Arch.	Asia Minor		
417	Autun, Porte S. André	France		G
418	Autun, Porte d'Arroux	"		G
419	Barcelona, City Gate	Spain		
420	Beisan, Forum (?) Arch	Syria		
421	Bulla Regia, Nymphaeum Arch . .	North Africa	†	
422	Capua, City Arch.	Italy		
423	Carnuntum, Janus Quadrifrons . .	Austria		
424	Carsoli, City Arch	Italy		G
425	Celenderis, Funerary Arch	Asia Minor		G
426	Elche, Arch of Rufinus	Spain	†	
427	Iassus, Tetracylon	Asia Minor		
428	Karden, Funerary Arch of Saturninus	Germany	†	
429	Lincoln, City Arch	England		
430	Madaura, Arch of Sabinus	North Africa	†	
431	Murviedro, Arch of Proba	Spain	†	
432	Mustis, City Arch	North Africa		G
433	Narbonne, Several Arches	France	†	
434	Numiuli, Arch of Candidus	North Africa	†	
435	Phylae, Temenos Arch	Egypt		
436	Pompeiopolis, City Gate	Asia Minor		
437	Pozzuoli, Porta Triumphalis	Italy	†	
438	Rome, Arch of "Horatius Cocles" .	"	†	
439	Rome, "Arcus Pacis"	"	†	
440	Sagalassos, Street Arch	Asia Minor		
441	Sagalassos, Arch near Gymnasium .	"		
442	Saldæ, City Gate	North Africa		G
443	Selge, South City Gate.	Asia Minor		
444-445	Sens, 2 Arches	France	†	
446	Sicca Veneria, Nymphaeum Arch . .	North Africa		
447	Sidê, Harbor Gate	Asia Minor		
448	Smyrna, City Gate, "Kara Kapu" .	"	†	
449-451	Spello, 3 City Gates	Italy		G (2)
452	Spello, Street Arch	"		G
453	Şua, Nymphaeum (?) Arch	North Africa		
454	Sufetula, City Gate	North Africa		
455	Suwêda, City Arch	Syria		

No.	PLACE AND NAME OF ARCH	COUNTRY		
456-457	Termessus , 2 City Gates	Asia Minor		
458	Theveste (near), Arch at Morsott . .	North Africa		
459-460	Thimida Bure , 2 City Gates	"		
461-463	Thimida Bure , 3 City Gates	"	†	
464	Verona , Arch of "Jupiter Ammon" .	Italy	†	
465	Vienne , Tetrapylon	France		G

Supplement

No.	PLACE AND NAME OF ARCH	COUNTRY		
466	Balbura , City Arch of Septimius Severus	Asia Minor		

NOTE

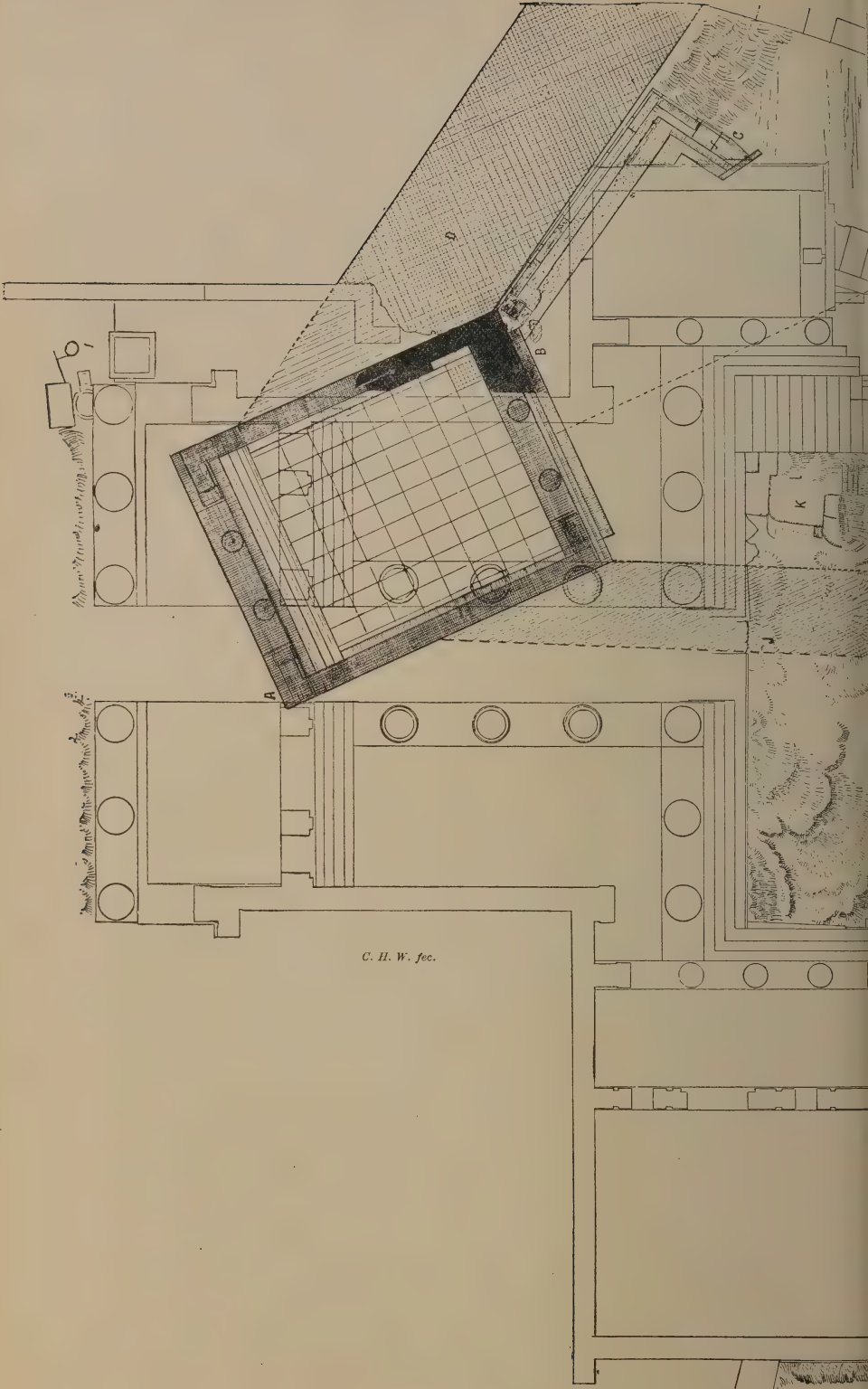
Some arches on this list are dated quite tentatively, and it may seem best in drawing up the final list to class them among the undatable examples; such are Nos. 114, 118, and 119. On the other hand, it may be possible, with a little more evidence, to transfer to the datable list such as those at Side, Pompeiopolis, and Althiburus. In the case of the two arches on the great bridges over the Pyramus (340) and the Maeander (341) the date given is that of their appearance on local coinage, but there is some evidence for ascribing the Pyramus bridge to Hadrian, and the Maeander bridge to Augustus.

The evidence as to the existence of a few arches is entirely from bas-reliefs, and may not always be conclusive, as in the arches of Turin (327) and Tarragona (62).

The complicated problem of the memorial gates and arches of Rome itself has been only slightly attacked; there is no field both so fruitful and so thorny. In the present list about eighty are enumerated; in the coming volume it is probable that such ancient gates as the Porta Trigemina, Porta Carmentalis, and Porta Septimiana will be included, and that the total will not fall far short of one hundred. However, a few of those

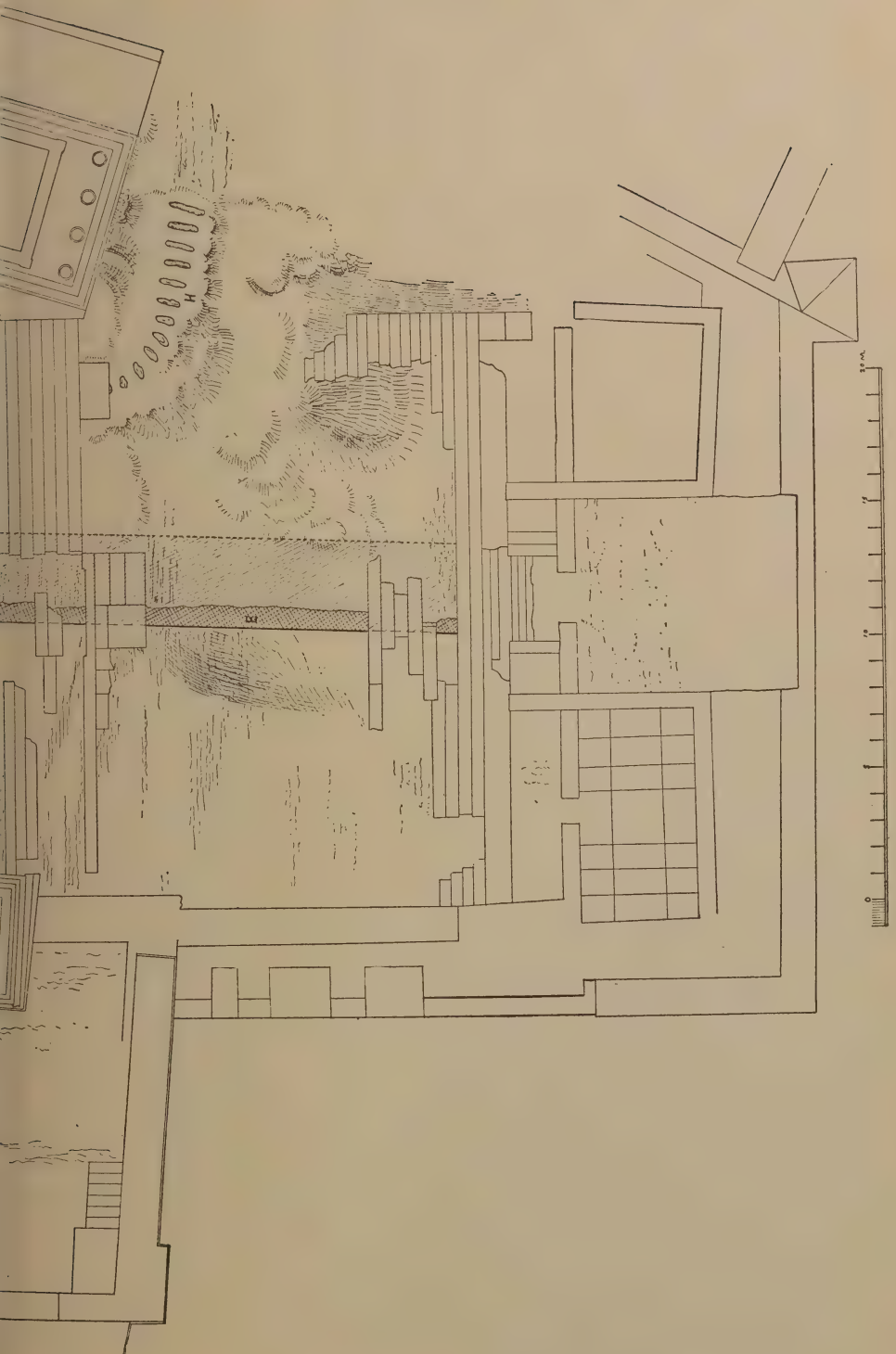
included in the present list are questionable and are inserted for the purpose of raising a discussion which may help to settle the complexion of the final list. Such are, in particular, the bridge arches of Septimius Severus (Nos. 300, 301), from Cohen, 521; the hypothetical arch of Faustina the Elder (No. 228), and that of Vespasian (No. 15), supposed to be the propylaeum of the *Forum Pacis*. The considerable number of arches ascribed to Domitian and Trajan in Rome may excite surprise. Hitherto, I believe, it has been thought that only two arches were built in honor of Trajan, that forming the entrance to his forum and that mentioned by the *Notitia* as on the Via Appia. My list has four arches, and to these it is even possible that a fifth should be added; the evidence on this point will appear in the volume on the Beneventum arch. As for Domitian, no attempt seems to have been made to specify any of his arches, except that mentioned by Martial and identified with the reconstruction of the *Porta Triumphalis* and the mediaeval *Arcus manus carnea*e near S. Marco. If, backed by the statements of Suetonius and Dio, I have attempted to single out other arches, it is partly on numismatic evidence which seems fairly conclusive. I hope that beside this topic of the arches of Domitian and Trajan, that of the *Arcus Pietatis*, as a probable memorial arch of Antoninus Pius, and that of the *Arcus de Tosectis*, as a probable memorial arch of Marcus Aurelius, will evoke discussion among students of Roman topography, especially in connection with the possible relation of the two arches to the memorial columns of these two emperors.

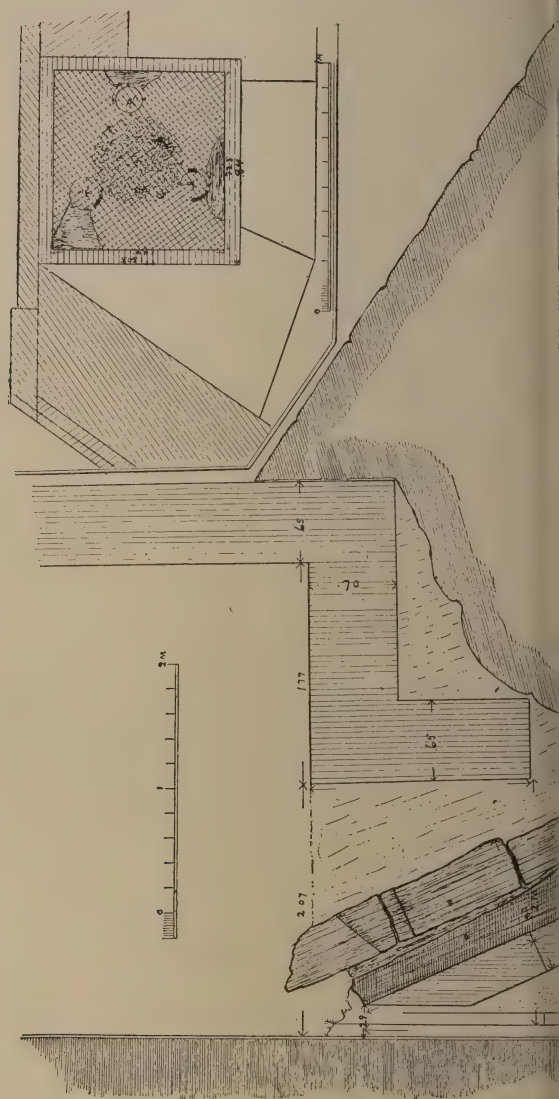
A. L. FROTHINGHAM, JR.



C. H. W. fec.

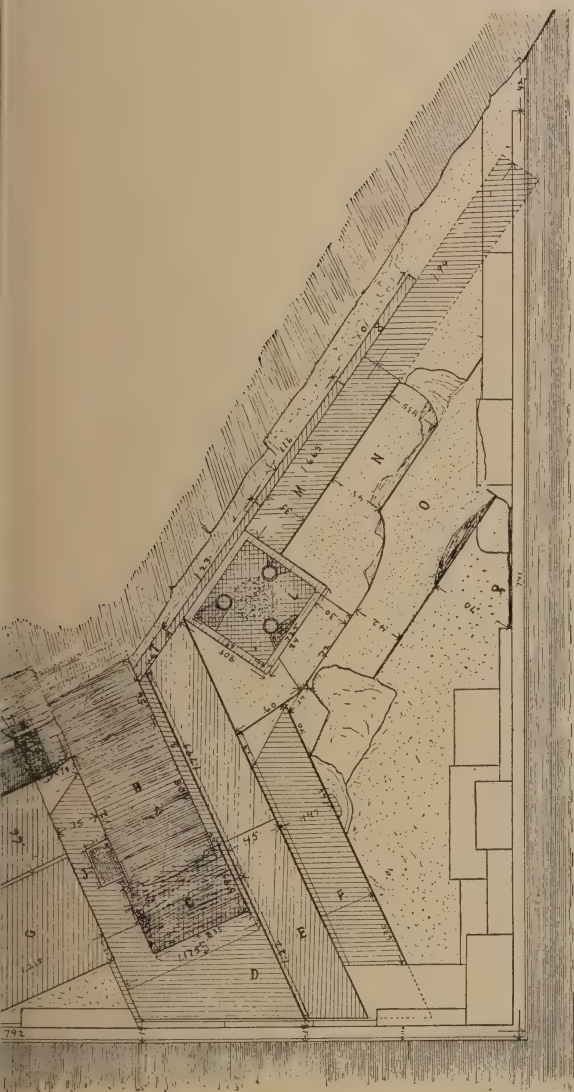
PRE-PERICLEAN PROPYLON





C. H. W. fec.

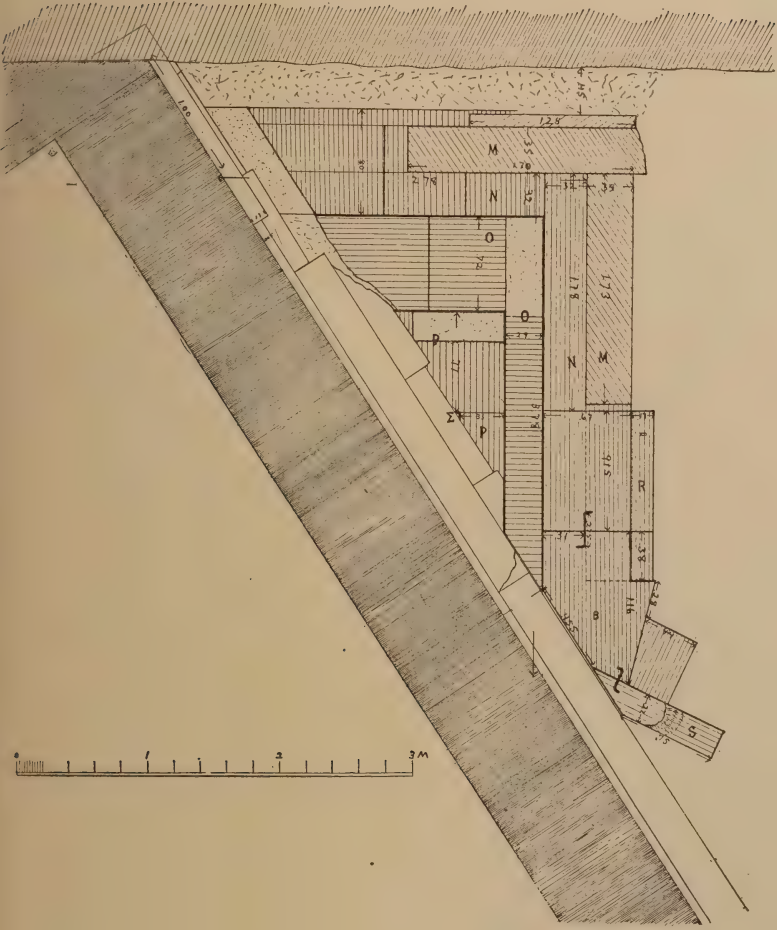
PLAN OF THE EXTANT CORNER OF THE



THE SOUTHWEST WING OF THE PROPYLAEA

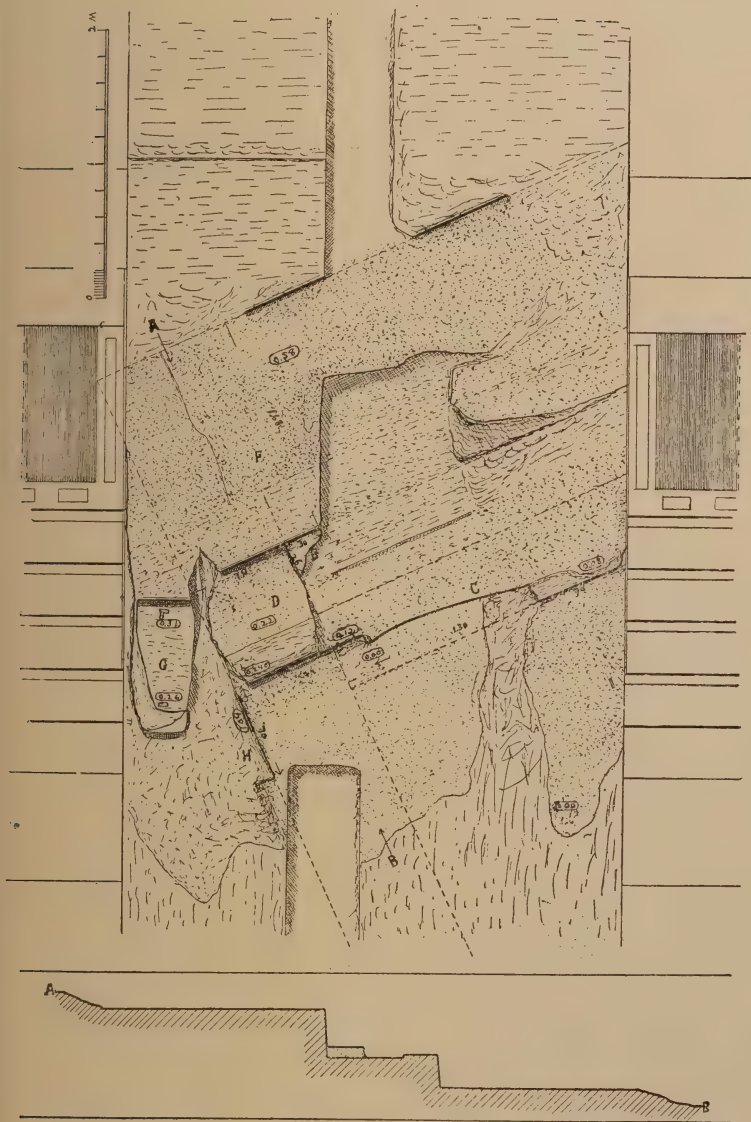


SECTION THROUGH PARASTAS AND STEPS, SHOWING THE FACE OF THE SIDE WALL



C. H. W. fec.

END OF THE SOUTHERN WING OF THE PROPYLON



C. H. W. fec.

CUTTINGS IN THE ROCK IN THE GREAT DOORWAY OF THE
PROPYLEA: BELOW, A VERTICAL SECTION

THE PRE-PERICLEAN PROPYLON OF THE
ACROPOLIS AT ATHENS¹

[PLATES I-VI]

THE problem to be considered in the following pages is the structure of the early gateway to the Acropolis at Athens. The ruins of this building are mostly covered or replaced by the splendid Propylaea of Mnesicles; yet enough survives, I believe, to permit a reconstruction of the principal features of the building. The problems as to the early approach to the Acropolis, together with the Pelargicon and other walls, will be touched upon only as is necessary for an understanding of the Propylon itself.

It is, unfortunately, difficult to obtain accurate accounts of the earlier excavations conducted on the Acropolis. In the case of the Propylon the only contemporary evidence as to the first excavation is that published by Ross in the *Tübinger Kunstblatt* and reprinted in his *Archäologische Aufsätze* in 1855. From his account we learn that the principal portion of the Propylon was laid bare in 1840, in course of excavations made about the Propylaea. At that time, in fact, the three extant portions were uncovered, with the exception of the small part cleared by the writer of this paper in the summer of 1901.

For the study of the early building we are dependent almost entirely upon the drawings made by Bohn, and published in

¹ For convenience of reference the gateway here discussed is in this article uniformly called the Propylon, while the Mnesiclean structure is called the Propylaea. A possible ancient precedent for this nomenclature will be found on p. 66.

1882 in his elaborate work on the Propylaea. It was while examining some of his measurements that the need of the present study was appreciated. One does not require an exhaustive test of Bohn's figures, at least in reference to the older gateway, in order to discover that they are in some instances inexact. In fact, some of the measurements of the Mnesiclean building are none too accurate, and would not warrant the drawing of minute deductions from them. In the case of the Propylon, Bohn seems to have erred sometimes through measuring at the level of the eye or at some chance level. For example, he gives different measurements for the inner and the outer faces of the marble anta, which will be described later (p. 40), while as a matter of fact the anta has the same dimensions on either face, but gradually tapers from the bottom to the top. In other cases he has approximated measurements, while some parts of the structure were then still under ground, the work of excavation, as will be seen, not having been completed. A detailed study of the ruin on the basis of Bohn's drawings was impossible, and a new set of drawings had to be prepared. The irregularities and occasional displacement of some of the stones, together with the narrow space available for working, make it difficult to secure absolute accuracy. The figures here published, however, have been repeatedly verified, and are, I believe, in essential points as exact as the condition of the remains permits.

Three main portions of the Propylon are extant, and now completely uncovered. These are, naming them in order from north to south, (1) certain cuttings in the rock in the great central doorway of the Propylaea (A in PLATE I); (2) a series of truncated marble steps, part of an inner side wall, a parastas¹ of *poros* blocks with marble anta, a section of the floor, rock-cut steps and a tripod base which belong to a wing,—all these being in the corner behind the southwest wing of the Propylaea (B in PLATE I); (3) steps and a corner

¹ The term *parastas* is here used to designate the wall of *poros* between the side wall and the anta proper.

continuing the wing of the Propylon, and situated south of the southwest wing of the Propylaea (C in PLATE I).

The second portion mentioned — the anta, steps, walls, etc., in the corner behind the southwest wing of the Propylaea — is the largest section of the ruins. The description of this region may properly be prefaced by the mention of the slight excavation which I made here in the summer of 1901. Desiring to make my measurements more complete, I obtained permission, through the kindness of Mr. Kabbadias, to clear the site, with particular reference to removing the earth and rubbish which had accumulated nearly to the level of the top of the stylobate beneath the anta and had rendered it partially inaccessible. Mr. Philios, the Ephor of the Acropolis, gave me much assistance, appointing some of the regular laborers of the Acropolis to aid in the work.

The appearance of the soil and the presence of iron mortar-shells were manifest proofs of the recent date of the upper layers of the earth removed. Below these, however, the soil manifestly had been in place since the time of the erection of the Propylaea, and, in fact, consisted largely of flakes from the marble of that building. In this earth were a few unimportant potsherds and some bits of lead and iron. The excavation proved, however, to be important in uncovering parts of the Propylon which had been hidden, restoring to us two fine marble steps under the stylobate of the anta, several rock-hewn steps below the tripod-base, a slab of the Propylon's floor (noted by Bohn, but in a wrong position), the lead-lined socket of an inscription or herm, and some minor details. I shall, therefore, first describe this portion as now revealed (Fig. 2), and speak more fully of the new parts as they are met.

The form of the ruins of this second portion of the Propylon may be seen from PLATES II and III and from Figs. 1 and 2. The greater part of them has been repeatedly described, and is familiar. It is worth while, however, to go over the ground again, in order to emphasize certain new relations. These remains constitute the corner of the Propylon, and consist of

part of the side wall, an anta with its parastas resting on the marble steps (Fig. 1), and a series of other steps cut in the native rock and forming an obtuse angle to the front of the structure. In this order I shall briefly describe them.

The portion of side wall which forms an angle of about 23° with the axis of the Propylaea is composed of white marble blocks, of irregular back-line and smooth face, resting imme-



FIGURE 1.—EXTANT CORNER OF THE PROPYLON BEHIND THE SOUTHWEST WING OF THE PROPYLAEA.

diately on the rock of the Acropolis, and backed by blocks of *poros*. The drawings show clearly the form and size of these stones. The total height of the extant wall throughout most of its extent is 1.76 m.; the total length, 4.65 m., inside measurement. At the eastern end one of the under strata of marble is made to project from the front plane of the wall to form a seat (H in PLATE II). The *poros* backing is of large rough-hewn blocks, not cramped together. The marble part is also

uncramped. Probably the weight of the great "Pelasgian" wall, which then was longer and higher than now, crowded against the backing so as to hold it in place. The tops of these blocks, both marble and *poros*, are in a single plane, and must have been carried higher by some other material, — wood or stone. How this superstructure began is indicated at the western end, where the wall is higher. At this point the backing is surmounted by a second, and even a part of a third, block of *poros*. Of these the second, whose face is 0.38 m. back of the front face of the wall, is cut under along its anterior surface, and leaves a recess, 0.18 m. deep and 0.10 m. high, for the reception of a thin marble plate, of which a small piece remains *in situ* (K in PLATE II). This fragment is 0.56 m. long, 0.18 m. wide, and 0.08 m. thick. It extends under the *poros* 0.18 m., and is flush in front with the face of the wall.¹ In the upper surface this plate is mortised to a depth of about 0.02 m. The mortise is 0.22 m. wide, and in the centre of the exposed portion, 0.08 m. from the front. The extent of the mortise toward the east is indeterminable, since the plate is broken. It seems likely, however, that the slab, as well as the wall, ran entirely across the side of the building. What material rested upon this plate we can only conjecture: not squared blocks, for in that case iron cramps, not mortises, would have been employed; scarcely even marble plaques, for neither is such veneering used in buildings of this period, nor are plaques, either, fastened in such a manner; not stone or brick, for the double reason that such material is not employed above marble, and because the thin marble slab would not be needed to support stuccoed courses. Wood appears to be the only substance left to be considered, and this may have been used. The side walls then would have consisted of the marble orthostates, with the seat in front of it, backed by a *poros* wall; upon this a wooden facing, also backed by a *poros* wall. The

¹ It is shown in the photograph (Fig. 2) made for me, since my return from Athens, by Rhomaïdes, but it has evidently suffered some displacement, and is now thrust forward a little.

poros in the extant portion is of very rough-hewn blocks, presumably, as has been noted, because the "Pelasgian" wall came against it. In the eastern part of the wall, where visible (from behind), the *poros* was, no doubt, more carefully wrought.

The lowest block at this western end of the wall is cut down at its bottom to a thin slab, which forms a part of the floor of the Propylon, its upper surface being flush with the loose slab of flooring still *in situ*. It bears some cuttings not readily explained, the chief of which is a rectangular depression, 0.34 m. by 0.18 m., apparently for the reception of the base of some statue, relief, or inscription. Nearly above this is a shallower depression, in the face of the side wall, 0.34 m. long by 0.32 m. wide. These two depressions do not, however, coincide, and can scarcely have belonged together. The lower edge of the cavity in the side wall is on the level with the upper surface of the seat mentioned above as projecting from one of the lower strata of the wall, and probably marks the site of some base which, at some later period, rested on a prolongation of this seat, the depression first mentioned having then passed out of use. From the length of the cuttings it appears that the base in question was at this later time set upon the seat, nearly above its former position.

At right angles to the western end of this wall and projecting toward the northwest is the parastas mentioned above (B in PLATE II), consisting of a well-finished wall of smooth blocks of *poros* terminating in a square anta of marble. This rests on the topmost of three marble steps which ran across the front of the building. The parastas does not spring directly from the side wall, which, on the contrary, is bevelled back for a length of 0.18 m., as can be seen in the drawings (PLATES II and III; see also p. 67). The hollow thus resulting at the irregular junction was filled with a fine stucco, so that the surface was made even with that of the side wall. In one or two places this stucco still remains.

Of the stylobate and two steps below it (D, E, and F in PLATE II) — all of which rest for the most part on the rock —

it has already been said that the lower step was first uncovered by the recent removal of earth. Very probably the earlier excavators dug only at the end nearest the tripod base, found there a smoothed area of native rock,—for this step is skilfully joined to a corresponding step in the rock,—and assumed that the bottom had been reached. The bottom step, however, has really the largest rise (0.40 m.) of the three, and itself has its bed on the rock. One of the lifting bosses—at the gravitational, not the geometrical centre—has not been hewn off, the rock below it being also, for some reason, left unsmoothed.

The upper step or stylobate proper is 1.175 m. in width, having a wide space (0.35 m.) behind (east of) the anta. When the accumulated earth was removed from here it was found that the corner of the stylobate at the inner angle was bevelled to match the bevel outside the parastas. Close up against the back side of the parastas was found, also, a socket evidently intended for some sort of a base (J in PLATE II). It is 0.33 m. by 0.21 m. inside, and about 0.02 m. deep. Upon the bottom and around the edges is a complete lining of the lead with which the base was fastened. What stood here one can merely conjecture. It can hardly have been a free statue, the socket being too near the wall. It may, then, have been an inscription or a herm. The hypothesis that it was a Hermes Propylaeus is tempting. As an inscription, however, it would be easily connected with the unknown articles which hung on the series of hooks inserted in the wall just above it (p. 65).

East of the stylobate, and with one end resting *in situ* on a ledge left on the stylobate for the purpose, is the only remaining portion of the floor (G in PLATE II), a fine, rectangular slab, 1.215 m. by 0.90 m., and 0.14 m. thick. Its eastern end rests partly on the rock and partly on artificial support. For some reason the workmen employed on the Propylaea left this solitary slab of the floor unbroken, a fact the more worthy of note when one sees how they cut away a part of the contiguous stone in the foundation of the new structure to receive the corner of this piece of floor. Even though the *poros* of the foundation is

easier to work, the sparing of the marble is yet interesting, inasmuch as a single blow of the hammer would have cleared the way for the new foundation quite as well. In one other place, too (cf. p. 43), similar treatment is seen, there, however, because the marble was harder to work.

The parastas proper is composed of five rectangular blocks of *poros*, rising one above the other upon the stylobate, and fronted by two vertical blocks of marble which form the anta. The *poros* blocks are smoothed and covered with a stucco which will be considered later. Each of the upper four blocks has a "Werkzoll," which seems here to have been meant for ornamental purposes and not for removal. At all events the stones are in general carefully worked, yet the "Werkzoll" is lacking only on the lowest, where its absence would not be noticed. On the outside, where the length is greater, the blocks are pieced out with smaller blocks of *poros* and a vertical slab of marble (see Fig. 1).

The marble anta, 3.515 m. high, and consisting of two pieces, the upper one now thrust forward a little, is not smoothly finished but slightly roughened as for the reception of stucco or color, traces of which remain. The margins are smoothed on the same plane as the remaining surface (see Fig. 2). None of these blocks appear to have been cramped together. The outward thrust of the upper block of the anta shows that there is no bond between. The top surface of this upper block has two deep holes for the insertion of lifting irons or lewis of the shears type. The detailed measurements of these members are given on the plans, and need not be repeated here.

Just outside, that is west, of the parastas, and joined to it at an angle of about 122° , is the old southwest wing, built close up against the ancient "Pelasgian" wall. The parts now extant are the rock steps, the marble seat and its backing, and the tripod base (L in PLATE II). Of these steps—hewn from the living rock, except for a small block which is inserted just in front of the tripod base—the lower had not been uncovered hitherto. The irregular margin at the southwest of the tripod

base is given in Bohn's drawing as the boundary, which in reality is a true curve, as the plan in PLATE II reveals. But below this is a wider step, and just at the edge of the Propylaea's foundation are evidences of still another (P at the side of PLATE II), which is immediately lost under the Propylaea. On the wide upper step rests the marble seat (M in PLATE II) which corresponds in position and dimensions to the seat pro-

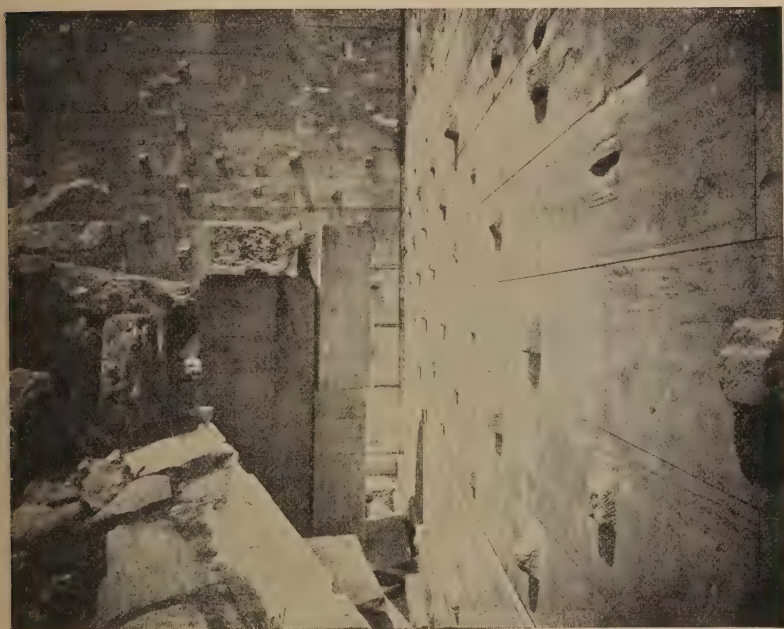


FIGURE 2.—EXTANT CORNER OF THE PROPYLON VIEWED FROM THE EAST.

jecting from the side of the Propylon as above described. Somewhat similarly to their treatment of the floor slab, the workmen preferred or found it more convenient to remove rather than to break the longer block (1.94 m. in length),—whose position is indicated on the plans with dotted lines in what was doubtless its original place,—and this now lies where they placed it, upon the shorter block (1.665 m.), which is *in situ*. In Bohn's plan this condition is overlooked and the longer block is treated as if *in situ*.

The inner end of the step just mentioned is placed against the well-known tripod base, of which a drawing on a larger scale is given in the corner of PLATE II. This base is discussed in some detail in the *Jahrbuch des Instituts* (I, p. 187) by Fabricius, whose inferences are undoubtedly correct (though he is slightly in error in some of the measurements). The lower block in this base is of *poros*, upon which is firmly fixed by socket and lead bonding the somewhat smaller marble blocks. Fabricius has shown that the tripod which rested on this base had a central column or pillar, whose bottom diameter is indicated by the roughened surface between the sockets for the feet. The tripod when removed was apparently wrenched from its fastening. The marble was broken in the effort, and pieces of the bronze rims remain, embedded in lead in the sockets. The distances between the centres of the sockets (0.42 m. to 0.43 m.) show the original spread of the tripod's legs.

Behind both base and step rises what remains of a marble backing, consisting of three thin slabs (circ. 0.10 m. thick), 1.31 m. high, and from 1.23 m. to 1.01 m. long.¹ These are held in place by fragments of stone and by earth thrown in between them and the great wall, and in front by the pressure of the base and step. No bonding of any sort is used. These slabs were continued in the part now destroyed, as we shall see also from other evidence. Between the inner slab and the parastas is an open space of 0.46 m., which, if filled at all, must have been filled by some other material. Whether or not a higher facing was built above these slabs, is a difficult question to answer. Neither in the slabs nor in the great wall are any cuttings for the reception of cramps by which a higher row of slabs could have been fastened. The top edges of the slabs, while uniform in height, are smooth and worked as if for junction with a second stratum, except for the needed cramp marks (see

¹ I am informed that the opinion has been advanced *viva voce* that these slabs were originally metopes of the "old Athena temple"; how the irregular widths (cf. p. 47) are explained I do not know. Besides, according to Penrose (*Principles of Athenian Architecture*, pl. 49), the metopes of the old temple inserted in the northern wall of the Acropolis are 4.4 feet (= 1.34 m.) in height.

Fig. 1). Yet the massive stones in the great wall in the part just over the first two slabs are thrust forward so as to project slightly beyond the face of the slabs. This thrust is not visible in the stones of the wall lying immediately upon those in question, or in the stones behind the parastas. Consequently, one is forced to think that the origin of the thrust is anterior to the time of the Propylon. But for its irregularities one might be inclined to see in it something like the familiar advancing angle of the walls of Troy, Gla, etc. At all events, this thrust seems to render unlikely the supposition that there was a marble superstructure to this portion of the marble backing. If any superstructure existed, it probably was of wood. More likely, however, there was none at all other than perhaps a moulding, the wall above this being open to view.

It has already been observed that the new Propylaea cut into this wing of the old Propylon. The southern limits are, however, determinable. In 1840, when the anta-corner was uncovered, excavations were also conducted in the angle between the "Pelasgian" wall and the southern wall of the southwest wing of the Propylaea (see Ross, *op. cit.* p. 78). At this point was discovered the third important section of the ruins—more important, perhaps, than has been realized (PLATE V). The rock-hewn steps which we found beneath the tripod base and running toward this corner ceased at some point under the wall of the Propylaea. Where the steps emerge south of this wall they are constructed of well-fitted blocks of *poros*, which continue in the same line for nearly three metres and then turn west in a right angle. The top step serves for the base or stylobate of a marble seat of the same style and dimensions as that adjoining the tripod base and resting on the highest rock-hewn step. One would expect, therefore, these steps and seats to be identical in elevation, and the outer or southern to be a continuation of the inner. Since the high wing of the Propylaea intervenes between the two, it is very difficult to determine by the rod their relative elevation. If we measure from the edge of the *euthynterion* of the Propy-

laea, an unexpected discrepancy is discovered. Instead of being on the same level, the upper surface of the *poros* step of the southern end of the wing is about 0.35 m. higher than the surface of the rock-hewn step inside, though the two are in the same horizontal direction. This was noticed by Bohn (whose figures are, however, again inaccurate); a dotted line which he draws from the surface of this *poros* step passes, when prolonged, above the upper surface of the tripod base (cf. PLATE IV). I pursued at first the same method of measurement, which assumes, of course, that the *euthynterion* preserves the same level on the two adjacent sides of the wing of the Propylaea. Desiring to test my figures, however, I made a series of levellings with an instrument, and discovered to my surprise that the seats and their stylobates are, after all, in the same plane and that the one is really a continuation of the other. This is gratifying so far as the Propylon is concerned, but reveals an extraordinary condition in the Mnesiclean structure, whose *euthynterion* on the east side of the southwest wing is about 0.35 m. higher than that of the south side. The reason for this is probably purely local, as it does not occur at the corresponding corner of the northwest wing. From an examination of PLATE II it will be seen that the *euthynterion* on the east side of the southwest wing of the Propylaea does not extend entirely to the corner, but stops 0.42 m. short of it. For this brief distance there is no *euthynterion*, and the *orthostates* is lengthened to take its place. The drawing of PLATE IV has been made to correspond to the elevations as now determined.

From this drawing, too, it will be seen that the first three *poros* blocks of the top step just considered are not of the full thickness of the step, but are cut diagonally at bottom and fit upon the hewn rock, which thus forms part of the inner face of the step. In each of the two steps below this, the rock forms an essential part, as the plan will make clear. That is to say, the whole was cut from the rock so far as possible, the *poros* being only used to fill in. The height of the upper step (0.30 m.) is the same as that of the corresponding rock-hewn step under

the tripod base. The second step is 0.72 m. wide along the back and 0.29 m. wide on the side, being mostly of *poros*. In height this (0.33 m.) does not correspond with the step of which it is the prolongation (0.26 m.). In Bohn's drawings no third step is represented, but the second is supposed to rest directly on the rock. Again, the first removal of the earth was somewhat carelessly done. The soil which had accumulated here was also removed in 1901, and the bottom surface cleaned. This process uncovered the lowest step, and made it clear that it is really a step and not a flooring, as it appears in Bohn's drawing. This third step was 0.77 m. wide at the back and 0.35 m. wide at the side toward the south. A triangle of four or five centimetres on a side is all that remains to prove its true character (Σ in PLATE V). Even this is left by the merest accident. It happens that one block of new foundation at this point retreats a trifle behind the rest. Had this block projected uniformly with its neighbors, all evidence would have been concealed. As it is, the case is clear. At this place there were three steps below the marble seat, not two, as below the tripod base. The steps are not all of the same height, but are governed by the contour of the rock. The discovery of the third step adds little to our general knowledge of the Propylon's wing, but is of some intrinsic interest. The greater width of all the steps along the back side only emphasizes the prominence that the back of the wing was meant to have over the branch toward the northwest.

Behind one block of the marble seat on the east side are the broken remains of one slab (1.25 m. in length; cf. p. 44 and note 1) of the continuation of the marble backing. It must have turned the corner behind the adjacent seat, and, as we shall soon see, extended a short distance only in the new direction.

This leads us to the investigation of the limits of this branch of the wing toward the northwest. It appears that the amount cut off by the new foundation is inconsiderable, and that the branch ceased originally about where it does to-day. The first reason for this belief is the consideration of the cramps. Of

these there are two, as shown in PLATE V, both being set in lead and of the $\neg$ shape, not $\neg$, as indicated by Bohn, who saw but the larger one. These are the only cramps in this portion of the structure, a fact which raises the question why these blocks were cramped, and not others. The reason lies at hand — because these were the end blocks, and were in danger of being shoved from their places. The rock shelves off before reaching the end blocks, and these are upon a comparatively deep foundation. The cramps, then, were necessary to prevent displacement. Moreover, the larger of the blocks (B in PLATE V) is cut at an angle, and to it the smaller (S in PLATE V) is cramped. The explanation of the strange juncture is found only when we consider this as the actual limit of the branch. The small block which makes this obtuse angle with the stylobate points toward an advancing angle of the wall of the Acropolis (see PLATE I), but the wall here has been repaired so often that this fact may have no significance. The presence here of a heap of blocks of great weight from the Propylaea makes closer investigation of the spot at present impossible. A few markings are given here on Bohn's plan, No. II. If the axis of the small block be produced inwards, it comes close to the point of contact of the parastas and the "Pelasgian" wall. I merely mention the facts here, without being able to suggest an explanation.

As remarked above, the marble backing of slabs ran behind this branch of the wing. From the surface cuttings in these last two blocks the outer limits of this backing are also learned. The cuttings (and cramp-marks) indicate that the backing extended to where the slightly depressed channel (0.17 m. wide) along the back of these stones ends, the marble seat probably terminating at the same point (see dotted line crossing larger cramp in PLATE V). Covering the remainder of the area of block B in PLATE V was probably a low anta of marble. This was close up to the end of the seat and perhaps of the height of the marble backing. The weight of this would give additional reason for making the stylobate as firm as pos-

sible by means of cramps. No evidence remains, so far as I can discover, to justify the belief that a roof covered this wing.

The significance of the cuttings in the rock in the large doorway of the present Propylaea was first appreciated by Ross after the discovery of the anta and side wall. From his words (*l.c.* p. 79) one infers that the work of clearing them was done in his presence, and that he was the first one to connect them with the anta. It is not easy to make a careful study of the marks, owing to their irregularities, the limited area accessible, and the extraneous material still covering part of them. During my stay in Athens this problem was yet further complicated because of the presence of the iron track on which marble was conveyed to the Acropolis for the repair of the Parthenon. The plan with section here given (PLATE VI) is accurate, I believe, so far as the conditions permit of accuracy. (The elevations given were made with a levelling instrument.) As these cuttings take an important place in the present investigation, I have tried to be especially careful in statement of fact.

From the plan it will be seen that the marks are not unsystematic and irregular, but that we can trace at least one or two distinct parallel lines running from the northwest to the southeast. These lines on Bohn's plans do not run quite parallel to the front line of the parastas and the supporting steps, but while direct examination of their relation is impossible, owing to the intervention of the Propylaea's walls, yet, after repeated measurement of the angles in various ways, I feel sure that the parallelism is complete, and that the cuttings were the site of a part of the Propylon. It is but a single step farther to determine that they indicate the boundary of the structure toward the east, since there are no marks beyond this point in that direction which can be connected with the building. It may also be inferred that we have here the site of some steps leading up to the higher level of the Acropolis. In the Propylaea the change of level is in the middle of the main megaron, while here it is under the eastern pediment. We shall find an interesting parallel to this in the Propylon at

Selinus, when we come to examine the similarities of that building to the one in question. But to return to the doorway. The short space now visible in this great doorway is all that is likely to be exposed for study. Even of this small portion the late watercourse, cut through the middle of the doorway, has destroyed a large share. At the outset, in studying this spot, it is clear that we have here only a levelling of the rock for some sort of a regular foundation. No exactness was attempted in constructing it, and we must be satisfied in finding approximate symmetry. The form of the cuttings is as follows: On a level with the floor of the Propylaea is a worked surface entirely in a horizontal plane, save along the north side (H in PLATE VI), where it rises four centimetres higher (note elevations in PLATE VI). Most of this surface has been made very smooth, as usual where the native rock has been prepared for a foundation. The higher and northern portion is rougher. At the back (C in PLATE VI) of most of this area the rock is 0.08 m. to 0.12 m. higher. The front outline of the step up is distinct (see Fig. 3), but its upper surface is uneven. At the north end, however, is a much higher step (D in PLATE VI), in general 0.22 m. above the lowest area and a trifle higher still on its front margin (0.245 m.). At one back corner of this step is a bit of another level (E in PLATE VI), and above this (F in PLATE VI), parallel with its front edge, is the highest step (0.58 m.), whose upper surface is also well smoothed. Of this highest step the water channel has broken away the centre. The southern end runs under the present building, while the northern end was hewn down when the new structure was building.

North of the step first mentioned is another cutting (G in PLATE VI) whose back line is parallel with the present Propylaea, and whose cramp-marks and sloping floor (0.31 m. to 0.26 m.) indicate with considerable certainty its later origin. Probably it comes from the time when a marble ramp was laid through the great doorway of the Propylaea. (These relations may also be studied in Fig. 3, from a photograph.)

It is not an easy matter to learn just what part of the Propylon occupied these cuttings. Yet, if they can be correctly understood, an important step in the restoration of the building will have been taken, namely, the determination of its original width. From the nature of the case it is evident that it must at least have been as wide as the distance from the rock cuttings in the doorway to the prolongation of the side wall. Ross made no attempt to formulate an hypothesis as to the width of the building, but expressed his opinion (*op. cit.* p. 79)

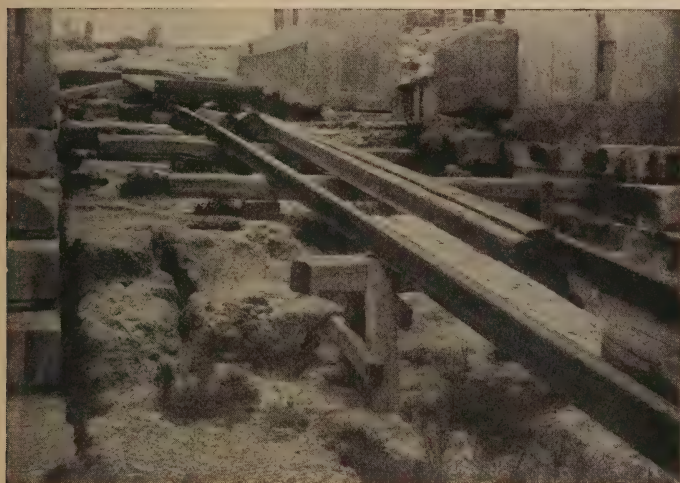


FIGURE 3. — CUTTINGS IN THE ROCK IN THE GREAT DOORWAY OF THE PROPYLAEA.

that the continuation of the cuttings would be discovered when excavation should be undertaken in the area east of the north-west wing of the Propylaea. As is now known, the actual excavation revealed nothing of the sort. The rock in the space in question proves much deeper than he thought, and the area is occupied by the large Roman cistern. These results aside, moreover, so great a width seems very improbable and not consistent with the structure of any other Greek propylaea, or even Greek building, that we know.

A more nearly correct theory, beginning with whom I have

been unable to make sure, has been incorporated in most recent drawings of the Propylaea. According to this view the step marked D in PLATE VI is apparently the site of the anta diagonally opposite the anta now extant. This would bring the corner of the Propylon a little farther to the north and under the Propylaea steps, the Propylon thus being almost square. This view, however, cannot be supported, I believe, by a study of the remains, though from Bohn's drawing it would seem entirely plausible.

The most likely location of the anta with its parastas and stylobate would seem to be the highest level in these cuttings as described above. The width of this level is 1.63 m., while that of the existing stylobate is but 1.18 m., so that the level in question appears at first thought too wide for the stylobate. But the two stylobates need not have had exactly the same width. It will be noted, moreover, that the first step below the existing stylobate is 0.45 m. wide. The step and the stylobate together, therefore, or a single slab of the same width, would occupy almost precisely the level in question, and thus the general effect would be preserved. (It may be added by way of illustration of what has just been said that the widths of the steps below the extant stylobate vary a little. Besides, it must be remembered that in the one case we are measuring the marble superstructure, in the other, the more or less roughly hewn seat for such a superstructure.) It will be safe, then, to place in our theory the anta and parastas at once on this higher level. If the place of the stylobate may be regarded as fixed, it is manifest that in the cuttings directly below must have been either a portion of the steps which effected the change of level or else the actual corner of the building, there having existed in the latter case no further prolongation of the structure to the north; that is, in the area now covered by the steps of the Propylaea. To determine which alternative is correct, we must return to a close study of the rock cuttings. Now, if there were steps across this space, it must at least be not impossible to trace the continuation of their bed north-

westward so far as the rock is visible. Of the highest level the northern limit cannot with certainty be established. From the drawing in PLATE VI it will be seen that it seems to have its continuation up to and perhaps under the steps of the Propylaea. As a matter of fact, however, it extends now no farther than these steps, which are set below this level, a close-fitting joint being made along the line of the steps. Why these were not put upon this level, if it continued farther, cannot be positively stated. From this surface, then, no certainty can be assured. Considering next the level immediately below this, we prolong the line at the back of step D,—that is, the front edge of the highest level,—and find that it runs at once into the uncut portion of the solid rock and can go no farther. Before the later cutting, G, was made, this phenomenon would have seemed even more marked. This line, therefore, must always have stopped at this place, while in the opposite direction it can be traced until it runs under the present steps. Of the line in front of D the same thing may be said. The front corner of G has been so much broken as to make the relation less certain, but if a rule be laid along the line, it becomes more than probable that it never ran beyond the present terminus. We find next that the line marked H in the plan and its continuation to the west mark the division between the smoothed floor and the higher and rougher surface just north. This marked change of level must, I believe, in connection with the limitations of the lines just mentioned, lead us to the conclusion that in the traces before us we have at hand an indication of the actual corner of the Propylon. The importance of this is evident. We see that the lines at the front and back of step D were not prolonged, because the building extended no farther, while the broken line H, and its westward continuation, together with the raised and rougher surface north of the line, which have no *raison d'être* if the floor of the Propylon continued farther to the north, find an adequate explanation if they be thought to mark the position of the side wall of the building. The higher and rougher

surface is thus seen to be the work of a later time; namely, the time when the floor of the Propylaea was made. In the period of the earlier structure the area north of the line was entirely unworked, only enough surface being hewn down to furnish a seat for the wall of the Propylon. It is, unfortunately, impossible at present to trace the line of the side wall farther toward the west. The rock in this region is covered with blocks of the later ramp. I believe that we have enough evidence, however, to make sure the position of the side wall, and I have, therefore, indicated it on the plan. If we know the location of the side wall, we obviously have the means of figuring the total width of the structure. The true position of the steps leading up to the Acropolis can now be fixed; namely, in the space just south of step D, already noted as being considerably lower than this step. Just what rôle was played by the triangular elevation E, by the side of step D, it is hard, in view of its present mutilated form, to determine. It may in some way have supported one of the steps. Its back line curves a trifle toward the front at the end nearest the water channel, but not enough to make it certain that the curvature continued or was at all marked. The dotted lines in this spot on PLATE VI may be regarded as the probable outlines of these steps, though there may have been three steps instead of two (cf. PLATE I). As in front of the extant anta, the steps may have been of unequal heights.

It is worthy of note that the sum of the heights of the two lower courses in the extant portion of the wall of the Propylon (0.31 m. + 0.27 m.; see PLATE III) is equal to the height of the highest step in these cuttings (F in PLATE VI). The walls, of course, had the same construction on either side of the Propylon. These two courses, then, raised the bottom of the higher *orthostates*-like course just to a level with the bottom of the step or stylobate which rested on this upper cutting.

The total width of the Propylon can now be measured, and is found to be about 11 m. Its length is about 13.5 m. The determination thus given is subject to some slight correction

because, on account of the intervening building, the measurement has to be indirect. The time at my disposal did not permit of the re-survey of the region needed to secure perfect accuracy. The variation from the truth, however, can hardly be more than five or ten centimetres.

The width being known, the remainder of the reconstruction can proceed on a sure basis. We examine first the floor. As has been seen already (p. 41), one slab of the marble flooring is extant. That all the others were of exactly the same dimensions cannot, judging from the floors of other buildings, the Propylaea, the Parthenon, etc., be presumed, yet no great difference is likely. The breadth of the extant slab, which is *in situ*, is 0.90 m. and this may be regarded as about the average width of the slabs of the floor. The distance of this slab from the side wall is 0.66 m. Applying these widths to the total interior width of the Propylon, we learn that there were nine rows of flagging (see PLATE I), with a like distance of 0.66 m. from the wall on either side. This also disposes, as will be seen later, one stone immediately before the centre of the middle intercolumniation and a joint behind each column, as is usual in Greek buildings.

The length of the extant slab of the floor is also nearly an exact divisor of the total internal length. This, however, is not so significant as the relations of the widths. It is worth noting that the extant piece of flooring is 0.03 m. lower than the zero point in PLATE VI, the point just below the eastern steps.

The width of the Propylon having been thus established, it is possible to consider the elevation, so far as data are obtainable. In most particulars, however, we are reduced to the familiar proportions of Greek buildings, and the reconstruction of the façade is largely conjectural.

In most Greek buildings the anta-breadth at the base is nearly or quite the same as the bottom diameter of the columns of the system. We may safely assume this relation to be true in the case of the Propylon. The two columns, then, for which the space between the antae gives room, must have been about 0.835 m.

in lower diameter. If the ratio of diameter to height be taken as one to five, as is reasonable for the time of the Propylon,¹ the total height of the columns would be about 4.165 m. This is found to agree with the height which the antae themselves seem to have had. The two blocks of the existing anta together are 3.515 m. in height, so that we have, in order to equal the height of the columns, room for one course of stone, or more probably marble, of the same thickness as the other courses in the parastas. This upper marble course had at its outer end the anta-capital whose shape is unknown. In the drawing of Fig. 4, the capital is modelled after that of the propylaea of Selinus, whose likeness to the present structure has been mentioned. This is, of course, purely conjectural, and this capital is very likely of too late a date to be taken into comparison. The opposite end of the block or blocks of this course must have reached the actual corner of the Propylon, which, as will be seen from PLATES I and II (cf. Fig. 4), extended about 0.25 m. past the point of contact of the parastas and the "Pelasgian" wall. Further evidence for the unusual prolongation of this course is found in the deep cutting in the adjacent boulder of the great wall (visible at the extreme left in Fig. 2). The bottom of this cutting is in line horizontally with the top of the extant anta, and must have served to support the course in question.

With one exception the remaining features of the restoration of the façade need not be discussed in detail. This one item is the arrangement of triglyphs and metopes. The example of the propylon at Selinus (see p. 68) proves that considerable freedom in the spacing of the triglyphs was regarded as admissible. In the case of that propylon, whose arrangement of antae, parastades, etc., is much the same as in our building, no triglyph came over the anta, though each of the corners and each of the columns had its regularly placed triglyph above it. The arrangement in the Propylon at Athens was more regular and happy. Each corner, each anta, and each column had a

¹ See Durm, *Handbuch der Architektur*, II, 1, p. 86.

triglyph centred above it. Besides, as in the building of Mnesicles, two triglyphs came over the middle intercolumniation, one over each of the side intercolumniations. Triglyphs and metopes were of uniform width throughout. These facts are of no small value as subsidiary evidence as to the correctness of the view heretofore stated of the Propylon's width. Under no other reasonable conditions of width would this arrangement have been possible. The distance from the corner of the Propylon now extant to the centre of the anta is, of course, fixed, and the other widths are now seen to fall into perfect

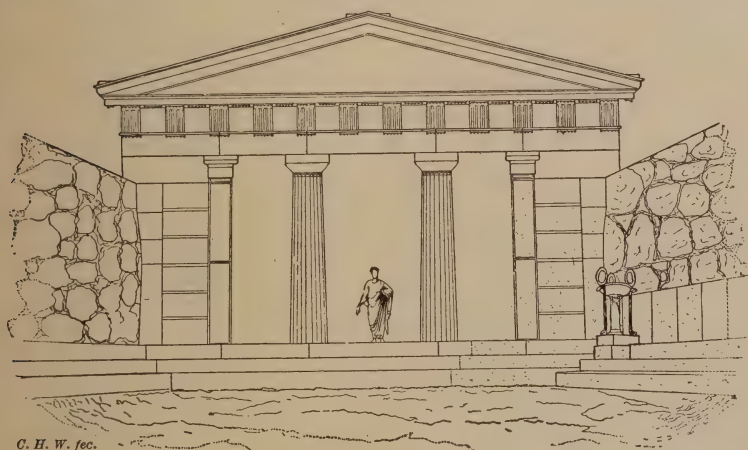


FIGURE 4. — FAÇADE OF THE PRE-PERICLEAN PROPYLON: RESTORATION.

harmony with this one. (It has not seemed necessary to give in detail the measurements of the triglyphon. The measurements given in the plans will be found sufficient for the examination of the conclusion here drawn. The inclination of the extant anta toward the column is about 0.06 m.)

No piece of columns, architrave, or pediment being extant, this part of the restoration is conjectural. Certain architrave members were found by Ross in course of excavations in the Niké bastion, and were thought by him to belong to some part of the Propylon, probably to a wing (*op. cit.* pp. 8, 16), but the scale of these members is certainly too small to allow them

to be connected with the existing anta, and there is no evidence of there having been a roof over the wing. The Ionic columns which Ross ascribed to the interior of the Propylon seem also too small (see Ross, *op. cit.* p. 82, and cf. p. 68) to have served such a purpose.

Architectural members of a larger kind and nearer to the scale of the Propylon are found in various parts of the foundation of the Propylaea, most noticeably in the northernmost extension of the foundation of the Pinacotheca. These, too, however, cannot, so far as I can discover, be brought into connection with the Propylon, and belong rather to the building of which some pieces are set up in the smaller museum of the Acropolis. I must mention also in passing what I have not seen noticed hitherto, the uniform and marked curvature of several of these cornice blocks, showing that they must have belonged to a circular or otherwise curved building. I do not know that we have record of any circular building of early date on the Acropolis, and suppose these blocks to have been conveyed from the lower city. When the anta and wall were first excavated, Ross found unmistakable signs of a red paint or stucco which covered both the *poros* and the marble. This color has mostly faded away, though there are still some traces. One or two fragments of the stucco which have been kept under cover still preserve the red undimmed. What colors were used for subsidiary decoration is unknown.

I have already noted that the façade of the Propylon forms an angle of about 122° with the "Pelasgian" wall. It is very interesting to find that precisely the same angle is made between this façade and a prolongation of a somewhat similar wall which leads up from the Beulé gate toward the centre of the Propylaea (E in PLATE I). Whatever view one holds as to the origin and original extent of this wall, the angle is, of course, indisputable. Being so, its possible connection with the Propylon is worthy of investigation. This wall was first discovered by Beulé in 1852; its course was followed throughout its whole

extent by Bohn in the excavation of 1880. The western terminus is uncertain, but there are no indications of its extent beyond the Beulé gate. That it stopped at this point is doubtful. Eastward, it certainly went as far as a well-marked cutting two or three metres above its present limit (F in PLATE I), but its bed was in general not cut in the rock, and it cannot be farther traced. Dr. Dörpfeld has suggested (*Ath. Mitth.* 1889, p. 325) that it was built in the time of Pisistratus to serve the purpose of a terrace wall, such a wall being needed because of the very rapid falling away of the Acropolis rock north of this spot. Such a date may be correct, though I am inclined to believe that the wall is older, and that it was both a terrace and a fortification wall. In consideration of the identity of angular position above mentioned, I venture to bring it more closely into connection with the Propylon, and to express the opinion that, as shown in the drawing, it originally extended as far east as that building. The width which has been given to it in the drawing is conjectural, though it is not incommensurate with other similar walls of the Acropolis, especially those near the Parthenon. That it was once wider than now is certain, since in its present form it could serve no purpose at all; only the lower courses are now preserved. The width of about three and a half metres has been assigned to it, in the belief that its southern face met the corner of the Propylon as the "Pelasgian" wall meets the opposite corner. The construction of the existing corner teaches us how necessary some such wall is, in order to produce a symmetrical effect in the Propylon's façade. The appearance of the corners is shown in Fig. 4. In this connection it is also worthy of note that the faces of the wall in question, as thus extended and with the conjectural width assigned to it, intersect the front line of the Propylaea at points where the Propylaea's foundation shows a distinct difference of structure; at the north intersection, a change is made from hewn *poros* blocks to a roughly cut limestone; at the south intersection, the first of two oblique foundation stones (cf. Bohn, *op. cit.* pl. iii), apparently belong-

ing to a previous structure, begins. At one point, just in front of the rough-hewn stone mentioned (J in PLATE I), a slight cutting in the rock may have been made in building the wall, or it may be too small to be of special significance.

The existence of this wall being posited, the peculiar orientation of the Propylon is understood. At least the "Pelasgian" wall, and, I believe, also the one just discussed, are older than the Propylon. It is certainly credible that we have in them an integral part of the old Pelargicon fortification, the apex of the angle between these walls being occupied originally by a fortress gate. Then, when the ornamental gateway was to be built, that orientation would have been chosen which was in a way fixed by these walls, and the symmetrical appearance of the façade would have been determined.

Of the small pieces of wall now buried in the Niké bastion, little need be said. Had this wall extended much farther toward the east, it would have interfered with the wing of the Propylon. For this and for other reasons it is likely that its altitude and length were not much greater in the time of the Propylon than they are now. At all events, the question does not seriously concern us.

One other relation must be noted at this point. It will be observed that if the central axis of the Propylon be prolonged toward the southwest, its extremity meets the façade of the Niké temple exactly at its middle point. This has seemed to me of sufficient interest to make it worth while to indicate the relation by a dotted line on the plan (PLATE I). Stated in another way, this means that an observer walking through the Propylon would have had the façade of the Niké temple exactly before him. I am unable to suggest any explanation of this strange relation, which may be merely accidental. The optical centre fixed by Pennethorne (*The Geometry and Optics of Ancient Architecture*, p. 41) does not fall near the front of the Propylon.

It is altogether likely that the southwest wing of the Propylon, which is built against the great wall, had its counterpart,

as in the Propylaea, in some sort of a corresponding structure on the opposite side of the façade, against the wall there restored. The steps indicated in Fig. 4 are conjectural, and probably wrong. Whatever existed in this region is now mostly covered by the foundation of the Propylaea.

One object, however, which was situated in this space¹ can be determined with much probability; namely, the Chalcidian chariot of bronze mentioned by Herodotus and Pausanias.² The passage from Herodotus reads as follows: *καὶ τῶν λύτρων τὴν δεκάτην ἀνέθηκαν ποιησάμενοι τέθριππον χάλκεον· τὸ δὲ ἀριστερῆς χειρὸς ἔστηκε πρῶτα ἐσιόντι ἐς τὰ προπύλαια ἐν τῇ ἀκροπόλει*,

¹ In consideration of the exigencies of space, the complexity of the problem, and the frequent treatment it has received, the discussion in this article has been made as brief as possible. Following are references to the most important literature on the subject: Kirchhoff, *Monatsbericht d. Berl. Akad.* 1869, pp. 409 f.; Wachsmuth, *Die Stadt Athen*, I, pp. 150, 547; Weizsäcker, *Arch. Zeit.* 1876, 46 ff.; Bursian, *Litt. Centralblatt*, 1875, col. 1080; Curtius, *Arch. Zeit.* 1876, pp. 54 f.; Michaelis, *Athen. Mitth.* 1877, pp. 95–106; Kirchhoff, *Ueber die Abfassungszeit des Herodotischen Geschichtswerke*, 2d ed. 1878, pp. 12–18; Wachsmuth, *Jahrbücher für Phil. und Päd.* 1879, pp. 18–24; Milchhöfer, in Baumeister's *Denkmäler des Klass. Altertums*, 'Athen,' p. 208; Weizsäcker, *Jahrbücher für Phil. und Päd.* 1886, pp. 5 ff.; Kirchhoff, *Sitzungsberichte d. Preuss. Acad. (Berl.)*, 1887, pp. 111–114; Lolling, in Müller's *Handbuch der Klass. Alterthums-Wissenschaft*, III, 'Topographie von Athen,' p. 343, n. 2; Lolling, *Δελτίον Ἀρχαιολογικόν*, 1889, pp. 193 f.; Reisch, *Griechische Weihgeschenke*, p. 12, n. 4, and p. 17, n. 3; Harrison and Verrall, *Mythology and Monuments of Ancient Athens*, p. 524; Bötticher, *Die Akropolis von Athen*, p. 192; Curtius, *Stadtgeschichte von Athen*, pp. 155, 300; Miller, *Am. J. Arch.* 1893, pp. 508 ff.; Stein, *Herodotus*, 5th ed., I, p. xxii, n. 1; Hauvette, *Hérodote*, pp. 47 ff.; Furtwängler, *Masterpieces of Greek Sculpture*, p. 10; Busolt, *Griechische Geschichte*, II, 2d ed., p. 443; Frazer, *Pausanias's Description of Greece*, II, pp. 352 f., V, p. 514; Iahn et Michaelis, *Arch. Athenarum*³, pp. 77 f.; Gardner, *Ancient Athens*, p. 253, n. 1.

Additional references, particularly to the inscription, are: Aristides, *Or.* 49, 2, 512, D; Anthol. Palat. VI, 343; Bergk, *Poetae Lyrici Graeci*⁴, 'Simonides,' 132; Schmidt, *Rheinisches Museum*, 1871, p. 200; Kaibel, *Epigrammata Graeca*, no. 748; Hiller, *Philologus*, 1889, p. 238; Köpp, *Jahrbuch des Instituts*, V, p. 274, n. 19; Preger, *Inscriptiones Graecae Metricae*, 72; Hoffman, *Sylloge Epigrammatum Graecorum*, 249; Röhl, *Imagines* (1898), 83; Lolling, *Κατάλογος τοῦ ἐν Ἀθήναις Ἐπιγραφικοῦ Μουσείου*, I, pp. 65 f., nos. 94, 95; Hicks, *Greek Historical Inscriptions*², pp. 13 f.

² Hdt. V, 77, and Paus. I, 28, 2; also Diod. Sic. X, 24, 3, *ἐκ τῆς δεκάτης τῶν Βοιωτῶν ὠφελείας ἄρμα χαλκοῦν εἰς τὴν ἀκρόπολιν ἀνέθεσαν, τὸδε τὸ ἐλεγείον ἐπιγράψαντες· Ἔθνεα . . . ἔθεσαν.*

‘and the tithe of the ransom they dedicated, making a bronze quadriga of it; this stands on the left hand as one enters the propylaea on the acropolis.’ The passage is simple, and no one would be likely to question its interpretation were not other evidence to be brought into connection with it. But there is more than one propylaea to be considered, and Pausanias seems to have an entirely different account of the location of the chariot. In his periegesis of the Acropolis, Pausanias is returning toward the Propylaea, and has just mentioned the colossal statue of Athena, which was located about halfway between the Erechtheum and the Propylaea; after this he says (I, 28, 2): *καὶ ἄρμα κείται χαλκοῦν ἀπὸ Βοιωτῶν δεκάτη καὶ Χαλκιδέων τῶν ἐν Εὐβοίᾳ*. This passage, then, in contrast with that of Herodotus would seem to locate the chariot east, instead of west, of the Propylaea. To reconcile these two statements has been a long-continued endeavor of scholars; and the quadriga has been by them variously located,—on the Agrippa base, on the slope westward of the Propylaea, beneath the western portico of the Propylaea, beneath the eastern portico of the Propylaea, eastward of the Propylaea, etc. But all these views overlook or disregard the possibility that Herodotus may be speaking, not of the Propylaea, but of the Propylon. The whole question, with its bearing on the life of Herodotus and the time of the composition of the latter part of his history, has been discussed by Mr. Miller in a previous number of this *Journal*, and still more conclusively since then by M. Hauvette (see note, p. 61), whose views as to the location of the quadriga seem to me substantially correct. The position of M. Hauvette is summarized by him as follows: “Hérodote n’a pas parlé en cet endroit des Propylées de Mnésiclès: l’état des choses qu’il a décrit pendant son séjour à Thurii, c’est l’état de l’Acropole avant les grands travaux de Périclès, avant la construction du Parthénon et des Propylées. Le nom de *προπύλαια* qu’il emploie désigne un emplacement situé en avant de la porte de l’ancienne Acropole. Plus tard, quand Mnésiclès éleva en cet endroit ses portiques, on dut déplacer le quad-

rige, et le transporter dans l'intérieur de l'enceinte, où le vit dans la suite Pausanias. Hérodote, qui habitait alors l'Italie, n'entendit pas parler de ce déplacement, ou négligea de corriger ce qu'il avait déjà écrit."¹

The inscriptional evidence of a fragment of an earlier and two fragments of a later base of the quadriga has not yet been mentioned. Of these the later, in letters of the middle of the fifth century, was found on the Acropolis in 1869; the earlier, in letters of the end of the sixth century, was found in 1887. The inscription on each base is the double elegiac distich given by Herodotus directly after the words quoted above.

The passage of Herodotus reads :

ἐπιγέγραπται δέ οἱ τάδε·

Ἔθνεα Βοιωτῶν καὶ Χαλκιδέων δαμάσαντες

παῖδες Ἀθηναίων ἔργμασιν ἐν πολέμῳ

δεσμῷ ἐν ἀχλυόεντι σιδηρέῳ ἔσβεσαν ὕβριν·

τῶν ἵππους δεκάτην Παλλάδι τάσδ' ἔθεσαν.

Strangely enough the hexameters are interchanged on the earlier base. This makes it evident that Herodotus copied the later inscription.² It may be fairly supposed that the first base was demolished at the time of the Persian invasion, and, per-

¹ With this view agree Stein (*l.c.*), Furtwängler (*l.c.*), and others.

² This inscription is *στοιχηδόν*, the two fragments having preserved for us the letters underscored and in their proper order in the following copy in type :

ΕΘΝΕΑΒΟΙΟΤΟΝΚΑΙΧΑΛΚΙΔΕΟΝΔΑΜΑΞΑΝΤΕΞΠΑΙΔΕΞΑΘ
ΕΝΑΙΟΝΕΡΓΜΑΞΙΝΕΝΤΟΛΕΜΟ

ΔΕΞΜΟΙΕΝΑΧΛΥΟΕΝΤΙΞΙΔΕΡΕΟΙΕΞΒΕΞΑΝΗΥΒΡΙΝΤΟΝΗΙ
ΠΤΟΞΔΕΚΑΤΕΝΠΑΛΛΑΔΙΤΑΞΔΕΘΕΞΑΝ.

The commentators seem not to have noticed that the second line, according to the traditional text, has one letter too many at its beginning, it being certain that in the inscription the initial letter of the second line stood exactly beneath the initial letter of the first line. This peculiarity may have been caused by the accidental loss of a letter, as of the *l* of ΔΕΞΜΟΙ or ΞΙΔΕΡΕΟΙ, or by crowding. There may be, however, some unexplainable trouble in the text. The word *ἀχλυόεντι*, for example, which is found only here,

haps, was not immediately restored. Indeed, Kirchhoff has expressed the view, based on the forms of the letters, that the restoration was just after the campaign of Pericles in Euboea in 445/4; Hauvette thinks the time of the battle of Oenophyta (456) quite as likely.

The disagreement of Pausanias with the statement of Herodotus, as remarked by Hauvette, is only apparent. When the new structure of Mnesicles was to be built, it was necessary to move the quadriga from its position before the Propylon. It was accordingly conveyed to the interior of the Acropolis, where it remained until the time of Pausanias. Probably the same base was used in its new position.

The location of the chariot in the time of Herodotus being established on literary evidence, it is very suggestive that we find "on the left hand as one enters the Propylon," a series of rock cuttings of considerable extent. These are beside the modern steps ascending from the Beulé gate and immediately in front of the Propylaea (K in PLATE I). A drawing in perspective of these cuttings is given by Bohn (*op. cit.* pl. xv, fig. 9; cf. p. 17). They are only partially exposed, so that it is impossible to learn with exactness the kind of foundation for which they were designed. At least there is nothing inconsonant with the theory that the chariot stood upon them, or at least in close connection with them.¹

has been handed down with very doubtful tradition. The Mss. of Herodotus show the variants, ἀχρυσθέρτι and ἀχρυσθέρτι, to which Schmidt has added the conjecture, ἀλγινθέρτι, and Hecker, ἀχρυσθέρτι. It is manifest from the present length of the line that the longer forms are impossible; one could wish, in fact, that the word were a letter shorter.

¹ In the inscription on the later base, the average width of a letter and its adjoining space to one side is four centimetres. Since, therefore, the longer line contains seventy-one letters, the inscription must have been about 2.84 m. in length, and the side of the base which bore it not less than three metres (cf. Michaelis, *l.c.*, whose figures are somewhat too small, his measurements of the letters being made from the published form of the inscription and not from the stone).

Of the block containing the earlier inscription, we are so fortunate as to have a part of all four edges of the inscription-bearing face. This enables us to estimate that we have the fourth block of the base, there being six in all. The

One more portion of the passage in Herodotus relating to this quadriga demands our attention. In speaking of the captured Euboeans and Boeotians, Herodotus says just before the words quoted above : τὰς δὲ πέδας αὐτῶν, ἐν τῇσι ἐδεδέατο, ἀνεκρέμασαν ἐς τὴν ἀκρόπολιν, αἷ περ ἔτι καὶ ἐς ἐμὲ ἦσαν κρεμάμεναι ἐκ τευχέων περιπεφλευσμένων πυρὶ ὑπὸ τοῦ Μήδου, ἀντίον δὲ τοῦ μεγάρου πρὸς ἐσπέραν τετραμμένον. Ross, in the article quoted above, was the first to suggest the connection of the passage with the Propylon. He understood the μέγαρον mentioned by Herodotus to be that of the Propylon itself, and held that the holes and broken hooks or nails still found in the existing walls are remains of the supports of the fetters. In PLATE III the location of the holes of the side wall is carefully plotted. The larger number, however, are on the inside surface of the parastas above described (p. 42), and appear clearly in the photograph (Fig. 2). Their real purpose is very uncertain, and we cannot count their presence of great weight. On surer grounds the μέγαρον in question is seen to be that of the "old Athena temple," near which the fetters probably hung. It is not at all necessary to bring the location of the fetters into connection with that of the chariot as seen by Herodotus, and nothing in the narrative of Herodotus compels such a view. Kirchhoff is probably correct in believing that the change made in the order of the hexameters of the inscription is due to this very separation of the chariot from the fetters, the δεσμῶ κ.τ.λ., therefore, no longer introducing the epigram. The time when this occurred may have been earlier than Kirchhoff thought.

We have very few literary references to the Propylon; nothing that aids in understanding its structure. In the narrative in Herodotus about the attack upon the Acropolis and its capture by the Persians, are references to the gates by which

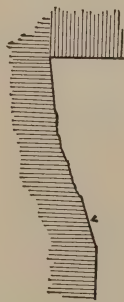
extant block is 0.50 m. wide, whence we find the total width of the six to be three metres, as estimated for the other base—and it is probable on general terms that the two blocks would have had about the same dimensions.

the citadel was defended. These passages are as follows : Hdt. VIII, 51, *φραξάμενοι τὴν ἀκρόπολιν θύρῃσί τε καὶ ξύλοισι ἡμύνοντο τοὺς ἐπιόντας*, 52, *προσιόντων τῶν βαρβάρων πρὸς τὰς πύλας ὀλοιτρόχους ἀπίεσαν*, 53, *ἔμπροσθε ὧν πρὸ τῆς ἀκροπόλιος ὅπισθε δὲ τῶν πυλέων καὶ τῆς ἀνόδου . . . ἀνέβησάν τινες*, 53, *οἱ ἀναβεβηκότες πρῶτον μὲν ἐτράποντο πρὸς τὰς πύλας, ταύτας δὲ ἀνοίξαντες τοὺς ἰκέτας ἐφόνευσαν*. These gates, however, cannot have been those of the Propylon (which, indeed, was probably without gates; see p. 68), but of the Pelargicon wall lower down.¹ Bare mention of the Propylon is found in an anecdote of Pisistratus, preserved for us by Aristotle and by Polyænus, as follows : Aristot. 'Αθ. Πολ. xv. 4, *ἐξοπλισίαν ἐν τῷ Θησείῳ ποιησάμενος ἐκκλησιάζειν ἐπεχείρει . . . οὐ φασκόντων δὲ κατακούειν ἐκέλευσεν αὐτοὺς προσαναβῆναι πρὸς τὸ πρόπυλον τῆς ἀκροπόλεως ἵνα γεγώνῃ μᾶλλον*. Polyænus, I, 21, 2, *Πεισίστρατος Ἀθηναίων τὰ ὄπλα βουλόμενος παρελέσθαι, παρήγγειλεν ἥκειν ἅπαντας εἰς τὸ Ἀνάκειον μετὰ τῶν ὄπλων. οἱ μὲν ἦκον . . . προελθεῖν αὐτὸν ἡξίωσαν εἰς τὸ προπύλαιον*. It is worth noting that both writers have the singular (but Herodotus, *l.c.*, has the more usual plural) for the name of the Propylon, "apparently used on purpose to avoid the grander *προπύλαια*, which would have been an anachronism in so far as it would have suggested the Propylæa of the time of Pericles." (Sandys, note on Aristotle, *l.c.*) Other than these, I am unable to find sure references to the building.

We learn from the passages just cited that the Acropolis certainly had a Propylon before the time of the Persian wars, as we should have anticipated; that we have before us the ruins of this building seems almost certain. Ross already noticed on the side wall signs of destruction by fire. The marble, in fact, still shows clear evidence of calcination. That the building was burned by the Persians is a natural infer-

¹ The order of the words *τῶν πυλέων καὶ τῆς ἀνόδου* seem to indicate this. Furthermore, the Propylon, like the Propylæa (cf. Bohn, *op. cit.* p. 4), was not meant and could not have served as a work of defence; nor is it thinkable that the defenders would have allowed their assailants to approach so near the summit before offering resistance.

ence, and if, as we have seen reason to believe (p. 39), the superstructure was of wood,—as no doubt the roof was also,—such burning is easy to explain. Furthermore, the use of Γ shaped cramps in the construction compels us to set the date before the fifth century.¹ It cannot be properly objected that these cramps are in the wing and not in the main structure. In the first place, the existence of the wing presupposes the existence of a central building of the same or of earlier date; in the second place, the priority of the construction of the anta to that of the wing is obvious from the blending and interlocking of the steps of the wing with those of the Propylon, no less than from the fact that one of the slabs of the wing actually runs under the corner of the parastas. The character of the material employed and the quality of the workmanship have led many to place the Propylon in the time of Cimon. This argument, however, proceeds largely on assumption. We have few of the buildings of Pisistratus's time left us, but it is quite sure that he may have used such material and in such a manner as is here used.² There are some signs, however, of a restoration. "The irregularity of the point of juncture of the parastas and the side wall has been observed already (p. 40). A drawing of this joint is given here on a larger scale. It may well be that the worked edge at A is the remains of an earlier union with thicker blocks in the parastas or with blocks differently placed. Evidence for a later arrangement of the marble bench by the side wall has also been mentioned. Very likely a restoration was made after the retirement of the Persians; perhaps later changes were made by Themistocles or Cimon.



¹ Dörpfeld, Curtius, und Adler. *Olympia, Text*, II, p. 43, "die Γ förmigen Klammern zwar in Athen in 5. Jahrhundert nicht vorzukommen scheinen." Cf. Harrison and Verrall, *op. cit.* p. 254.

² Bohn, *op. cit.* p. 3, "Ein Herrscher (Pisistratus) der so viel für den Schmuck der Stadt getan wird auch für eine Künstlerische Ausbildung des fortifikatorischen Burgaufganges Sorge getragen haben."

Mention has already been made of the relation to this building of the Propylon before the Megaron of Demeter at Selinus (pp. 50, 56). Of this, Koldewey and Puchstein, in *Die Griechischen Tempel in Unteritalien und Sicilien* (pp. 82 f., pl. ii), say, "Es ist ein breiter, saalartiger Raum, der in eigentümlicher Weise nach O. und W. durch zwei Säulen zwischen Anten (oder genauer gesprochen, zwischen Antepagmenten) geöffnet ist, im Osten etwas weiter als im Westen." A comparison of the two buildings reveals many points of resemblance which will not be discussed here in detail. The flight of steps in front, the higher stylobate in the rear, the two columns between "Antepagmenten" and the triglyphon, are very similar, and suggest some connection with the type of building at Athens. It is from a comparison with this structure that I refrain from assuming the insertion of doors or interior columns for the Propylon, there being no direct evidence to guide us in this particular. The Propylon at Selinus, however, is of the fourth century, and the omission of doors (it had iron gratings between columns and antae) may be, after all, a late local peculiarity. The Propylon at Athens is larger (that at Selinus is 8.70 m. by 8.30 m.) and may have required central support for the roof.¹

To the period of the Propylon or earlier we must assign the origin of the road, of which the familiar markings remain at the foot of the Niké bastion. This, too, was discovered by Beulé, who thought that its course had been past the Agrippa pedestal, then turning toward the old gateway. "Le chemin semble avoir passé," he says (*L'Acropole d'Athènes*, p. 45), "sous l'angle sud-ouest du soubassement du temple de la Victoire. Il monte dans la direction du piédestal d'Agrippa," etc.

¹ The much earlier propyla at Tiryns had central doorways, — in the outer, however, a somewhat later addition. The propylaea at Sunium, of almost the same dimensions as our Propylon, had central doorways. Curtius holds (*Stadtgeschichte*, p. 68) that the Propylon must have had a gate, "denn die Anaktensitze pflegten alle zu Wagen und Ross zugänglich zu sein," and says it is explicitly said that Pisistratus went up by wagon to the Acropolis.

The drawing of PLATE I shows the holes of this path, as replotted and remeasured. (After bending, they pass farther to the south than Bohn indicates.) The course of the extant portion makes it evident that Beulé (cf. Michaelis, *Ath. Mitth.* 1876, pp. 275 ff.) was wrong in thinking that this road ran past the Agrippa pedestal. It is seen to turn toward the east as soon as it rounds the Niké bastion, and to disappear under the modern steps, as, in fact, the adjacent wall to the north made necessary. When the modern steps of Desbuisson are removed, as they should be without delay, it will probably be possible — though the last of the holes of the path are fainter and may not have a distinct continuation — to trace the road farther toward the entrance of the Propylon,¹ whose existence, however, it may antedate by many years.

What has already been said makes it evident also that the path cannot be of mediaeval origin, since the mediaeval road, as well as that of the time of the Propylaea, passed by the Agrippa pedestal. Furthermore, the drawings of Stuart and Revett (II, p. v; ch. V, pl. i) make it very probable, if not certain, that this area was covered with earth during their time, as with little doubt it had been for many years before them.² Finally, we are informed positively on this point by Beulé (*op. cit.* p. 44) that the road in question was, when he began to excavate there, buried with sand and débris, on which rested a later road, “près de la porte construite au moyen âge,” and “grossièrement pavé.” “J’ai fait,” he continues, “enlever ce pavage, enlever le sable et les débris sur lesquels il reposait, et l’on a vu reparaître le rocher de l’Acropole avec ses traces vieilles de trois mille ans.” This would seem to exclude definitively any belief in the road’s late origin.

In this connection mention should be made of the distinct traces of six steps situated at the side of the cuttings where we have seen reason for placing the Chalcidian quadriga. They

¹ Bohn, *op. cit.* p. 15. Cf. *Ath. Mitth.* 1880, pp. 309 ff.

² Cf. Guhl and Koner, *Leben der Griechen und Römer*, 6th ed. p. 110.

are evidently the remains of some early ascent near the road just discussed.

Repeated examination of the "road" running eastward toward the Erechtheum from near the east portico of the Propylaea (cf. Michaelis, *op. cit.* pp. 278 f., pl. xv) leads me to the belief that it was not a road at all and that it has nothing to do with the Propylon. Not only are other such roads unknown on the Acropolis, but at the western end of the cutting in question a ridge of rock juts out into it in such a way as to preclude the belief that this "road" continued farther.

CHARLES HEALD WELLER.

NEW HAVEN.

Archaeological
Institute
of America

GENERAL MEETING OF THE ARCHAEOLOGICAL
INSTITUTE OF AMERICA

DECEMBER 29-31, 1903

THE Archaeological Institute of America held its fifth general meeting for the reading and discussion of papers at Cleveland, O., December 29-31, 1903.

The meetings, which were held in the main building of the Adelbert College of Western Reserve University, were presided over by the President of the Institute, Professor Thomas Day Seymour. On Tuesday evening, December 29, the members dined together at the University Club. On Wednesday the visiting members were entertained at luncheon in Eldred Hall by members of the Cleveland Society; and on Thursday, by Mr. Howard P. Eells, President of the Cleveland Society, at the Roadside Club. On Wednesday evening the Annual Address before the Institute was delivered by Professor Rufus Byam Richardson, on *A Quarter Century of Mycenology*.

A resolution was unanimously passed thanking the President and members of the Cleveland Society, the authorities of Western Reserve University, and others for the hospitable reception given to the Institute.

There were four sessions at which papers, many of which were illustrated by means of the stereopticon, were presented. Brief abstracts of the papers, furnished by the authors, follow.

TUESDAY, DECEMBER 29. 3 P.M.

1. Professor G. Frederick Wright, of Oberlin College, *The Archaeological Interests of Central Asia*.

Central Asia has many claims to being considered the original centre of civilization, if not of the human race. Some scholars have held that it was in the area of the great Aral-Caspian depression, and in all probability in the southeastern portion of that area, that the Aryan language and civilization originated. The distribution of the Mongolian races also indicates that as a centre of their migrations. That the region was early occupied by a dense population is indicated by the numerous prehistoric mounds that are scattered, not only over Turkestan, but along the southern border of Siberia. The efforts of Alexander to conquer the region bear witness to its importance in the fourth century before the Christian era, while the origin of the religion of Zoroaster is to be traced to the same centre—this great religious reformer having lived at Balkh. Numerous ruins dating from the time of Alexander and his successors are scattered through Bactria and other provinces. The ruins of Merv have been but little explored. The Russians have, however, shown much interest in the preservation and exploration of the ruined sites. There is a very creditable historical and archaeological society at Taschend, where already are accumulated many relics of the Graeco-Bactrian kingdom. Similar societies exist in nearly all the Siberian cities. That at Minusinsk, on the Yenisei River, is specially to be noted, as there the prehistoric mounds have yielded clearer evidences of the transition of the human race from the Stone through the Bronze to the Iron Age than are found anywhere else. These are collected, classified, and preserved in a commodious museum, which stands side by side with a library, the two buildings being, aside from the church, the most conspicuous in the place. The museum at Irkutsk is likewise well stocked with local archaeological discoveries.

The many indications of a much larger rainfall in former times help us to appreciate the importance of this early centre of population, and enhance the importance and interest attending explorations in that region. In the time of Jenghiz Khan, in the fourteenth century, Samarkand and Merv probably contained a million inhabitants each, while there were other cities nearly as large. Three hundred years later, in the days of Tamerlane, Samarkand became one of the most splendid cities in the world, the ruins of its great buildings rivalling in interest those of Greece and Egypt. It will be of much

interest and importance for archaeological investigators of America to keep in communication with the Russians who are manifesting such a liberal interest in the explorations of the region.

Remarks were made by Professors Kelsey, J. H. Wright, and Marquand, and by Professor G. F. Wright in reply.

2. Miss Leila Clement Spaulding, of Vassar College, *Sixth-century Attic Inscriptions*. (Read by Dr. C. P. Bill.)

Hitherto, sixth-century Attic stones have been grouped in definitely dated divisions, and the grouping has been based chiefly on individual letter forms. Such a method of classification is inaccurate, for it takes into consideration only one characteristic of a given inscription, and makes no allowance for individual eccentricities on the part of stone-cutters.

In attempting to date any inscription the following points should be considered: (1) the content of the inscription; (2) the place of finding; (3) the material; (4) the letter forms; (5) the form of the stone; (6) the direction of writing; (7) the general arrangement of the letters, *e.g.* stoichedon; (8) grammatical or philological peculiarities. Some of these points have not met with the attention they deserve in the study of Attic inscriptions. *Poros* stone, as a rule, antedates marble in sculpture. Why is it not in epigraphy one evidence of antiquity? Some exquisitely cut marbles are written retrograde. Must they necessarily be earlier than a rudely cut stone which reads from left to right?

From consideration of these points we reach the following conclusions concerning pre-Persian Attic inscriptions. From the eighth century comes the Dipylon vase with its crooked iota and very old letter forms combined with retrograde writing. A number of years probably elapsed before the iota became straight, as we find it even on *poros* stones. These also show koppa, which gives way to kappa on the earliest marbles. The use of marble for inscriptions may have been well established by the end of the seventh century, although there are, doubtless, exceptional uses of *poros* even during the sixth century. During this century, also, the technique of the marbles gradually improved, tending to straight lines and erect letters. Stoichedon writing comes into vogue late in the century. From the early years of the fifth century we have such artistic work as the famous "Hekatompedon" inscription.

3. Miss Alicia M. Keyes, of Concord, Mass., and Professor John Henry Wright, of Harvard University, *Notes on Titian's*

Relations to his Literary Authorities in his Painting of Mythological Subjects. (Read by Professor Wright.)

Miss Keyes, in working upon Titian, has discovered two laws observed by the master, which have reference to his use of sculpture in decoration, and, in the case of paintings based on literary originals, to his relation to these literary originals. A recognition of these laws is an important factor in determining the interpretation of certain of Titian's enigmatical paintings—in particular, the so-called 'Sacred and Profane Love.' This famous picture appears to be based on the *Pervigilium Veneris*, which, though not printed until 1577, was known in a manuscript copy (or copies) in Venice early in the sixteenth century, being mentioned by Erasmus (before 1508) as owned by Aldus Manutius, and as, in his opinion and in Aldus's, the work of Catullus. The picture represents one of Venus's train (Peitho?) inviting the *virgo Delia*, conceived not as the goddess Diana, but as a human maiden (cf. Tibullus's Delia), to join on the morrow in the festival of Venus,—*cras amet*, etc. (*The Nation*, December 17, 1903.)

In verifying the law of Titian's relation to his classical sources, and in discussing the origin and nature of his knowledge of them, Mr. Wright noted that the paintings under consideration fall into two classes, in each of which the artist shows equal and similar fidelity to his literary originals: (1) reproductions of actual paintings, or like works of design, described in classical writers; (2) illustrations of scenes depicted in poetry. Under Class 1 fall the 'Erotes and Venus-worship' (Philostratus, *Imagg.* I, 6); the 'Bacchanals' (*Id. Ibid.* I, 25, with perhaps Tibull. III, 6); 'Bacchus and Ariadne' (Catull. 64, 51 and 252 ff., with 64, 7-10); 'Venus Anadyomene' (Auson. *Epig.* 106); 'Europa and the Bull,' 'Antiope and Zeus,' 'Danaë and the Gold,' 'Apollo and Issa,'—all four being reproductions of scenes embroidered by Arachne (Ovid, *Met.* VI, 102, 110, 113, 124). Under Class 2 would fall 'Peitho and Delia' (ps. Catull. *Pervigilium Veneris*), and other paintings, many of which, as well as some of the foregoing, were called by Titian *poesie*, and of all of which the literary original is Ovid's *Metamorphoses*: 'Diana and Callisto' (II, 528 ff.); 'Diana and Actaeon' (III, 180 ff.); 'Tityos, Tantalus, Sisyphus, and Ixion' (IV, 457 ff.); 'Andromeda and Perseus' (IV, 979 ff.); 'Ganymede' (X, 155 ff.); 'Venus and Adonis' (X, 515 ff.). There is evidence that Titian had a first-hand knowledge of Ovid, though his learning in the myths that he portrays did not go beyond his text; thus the Nyctēida (Antiope) of Ovid, *Met.*

110, becomes *la nuda con . . . il satiro*. Possibly his intimate friend, Navagero, who read the proofs of the *editio princeps* of Ovid (Aldine press, 1502), guided him to this poet. Titian's knowledge of other writers came through the mediation of learned friends: that of Catullus, undoubtedly through Ariosto; of Philostratus, perhaps through Aleander, Bembo, or Ariosto (not Aretino, as H. Grimm suggests — Titian had not met Aretino when the scenes from Philostratus were painted); of Ausonius, through Aretino. The four paintings made for Queen Maria of Hungary, in 1548, were based on Ovid, *Met.* VI, 457 ff., and represented Tityos, Tantalus, Sisyphus, and Ixion. The painting now in Madrid, long known as 'Prometheus,' is in reality the 'Tityos'; it is correctly referred to in Vasari, though the text is confused, but is wrongly named 'Prometheus' in several early inventories, much as Titian's Danaës were sometimes called Venuses.

4. Professor W. H. Goodyear, of the Museum of the Brooklyn Institute, *Brooklyn Institute Surveys of Early Byzantine Churches at Constantinople and of Gothic Cathedrals of Northern Europe*.

An investigation carried on by the Brooklyn Institute Museum, since 1895, and originally begun by the speaker in 1870, has had a threefold object: (1) to ascertain whether intentionally asymmetrical construction was practised by mediaeval builders; (2) to ascertain whether such asymmetrical construction can be designated as belonging to a system of architectural refinements; (3) to ascertain whether such architectural refinements can be related historically to those of the ancient Greeks.

An affirmative answer to the first question was obtained, in 1870, through an investigation of the Pisa Cathedral, which was published in *Scribner's Magazine* for August, 1874.

An affirmative answer to the second question was obtained through a general investigation of all the important cathedrals of Italy, in 1895 and 1901, and through an investigation of the cathedrals of northern France, in 1903. The Italian cathedrals have been published in: *Memoirs of Art and Archaeology*, Nos. 1 and 2, published by Macmillan for the Brooklyn Institute of Arts and Sciences; *American Journal of Archaeology*, Vol. VI; the *Architectural Record*, Vol. VI, Nos. 1-4, Vol. VII, Nos. 1-3.

An affirmative answer was obtained to the third question, in the summer of 1903, through an investigation of the early Byzantine churches of Constantinople; and it is now possible to announce

that the horizontal curves of Greek antiquity have been found in St. Sophia, and that vertical bends, which are related to the Greek entasis, have been found in St. Sophia and in two other Byzantine churches, namely, the sixth-century church of St. Mary Diaconissa and the eleventh-century church of the Monastery of the Chora. A widening refinement, related to the vertical bend, has been found in the church now known as the Balaban Aya Mesjid.

The earlier investigations of 1870, of 1895, and 1901 were confined to Italy, that of 1903 has been extended also throughout northern France; and whereas the earlier investigations were most fruitful in the Italian Romanesque, or in the Italian Gothic churches which are most nearly related to the Italian Romanesque, the investigations of 1903 have demonstrated the existence of architectural refinements in all the best-known and most famous Gothic cathedrals of northern France. Especially is this true of the refinement of vertical curvature in the faces of the piers bearing on the nave and transept, a refinement which is generally connected with an outward divergence of the faces of the piers in the upward direction.

The following cathedrals have been found to exhibit the refinement of vertical curvature, namely, Notre Dame at Paris, Soissons, Châlons, Rheims, Laon, Noyon, Beauvais, St. Quentin, Rouen, Chartres, Coutances, Dol, Strassburg. The same curvature has been found in the churches of St. Remi at Rheims, Notre Dame at Châlons, and Montierneuf at Poitiers. The widening without the curvature has been found in the following churches: St. Loup at Châlons, St. Thomas at Strassburg, St. Jean and St. Pierre at Caen. Delicate curves in the nave, and widening without curves in the aisles, have been found in St. Alpin at Châlons. In two churches the phenomenon is confined to the apse, namely, St. Radegonde at Poitiers and the Schotten-Kirche at Vienna. By this last observation the widening refinement is dated as late as the close of the seventeenth century.

The most important result of the observations in northern Europe is obtained by comparing the number of sites examined with the number of sites in which no vertical curvature or widening has been found. Out of twenty-seven sites examined in northern Europe, only four were found in which these refinements were not discovered. The inference is unavoidable that the Gothic architecture of northern Europe will be found to exhibit such architectural refinements in a very large number of additional instances.

Among the cathedrals examined, that of Notre Dame at Paris occupies a wholly exceptional position as regards a large number of

such architectural refinements as have already been observed and published for the Pisa Cathedral and for St. Mark's at Venice. The number and variety of these subtleties may be inferred from the fact that eighty-five negatives were made this summer in Notre Dame, all of which are illustrations of these phenomena. As regards the existence of the phenomena throughout France, they are demonstrated visibly by a series of 330 negatives (including those from Notre Dame), all of which were personally made by the speaker and all of which are the property of the Brooklyn Institute Museum. The enlargements from these negatives will be added to the large collection now on exhibition in that museum, which already includes forty-five photographs from St. Mark's at Venice, fifty-five photographs from the Pisa Cathedral, and about three hundred for other Italian churches and cathedrals.

WEDNESDAY, DECEMBER 30. 10 A.M.

1. Professor Walter Dennison, of the University of Michigan, *An Unpublished Bust of the so-called Scipio Type.*

Attention was called to a marble head, acquired in 1880 by Dr. Joseph Cook, of Boston, and presented in 1901 to Oberlin College, where it is preserved in the college library. From the style and the manner in which the eyes are worked, this head seems to belong chronologically quite early in the series of busts which bear the name of Scipio. The speaker presented evidence which inclined him to the belief that these busts are portraits of men belonging to certain orders of the priesthood of Isis, but he did not wish to express a final opinion before making further investigation.

Remarks were made by Professor Sanders.

2. Professor Samuel Ives Curtiss, of Chicago Theological Seminary, *Survivals of Ancient Semitic Religion in Syrian Centres of Moslem and Christian Influence.*

Precisely the same rites which are to be found among the Bedawins and the Fellahin may be observed in such a Europeanized city as Beirût and in other centres of Moslem and Christian influence.

(1) The monastery of the Carmelites on Mt. Carmel is called a Makâm, a term in use before the days of Moses (Deut. xii, 2).

(2) Sacrifices were offered at the last annual festival of Mar Elias, at the church of the monastery, by villagers, and the blood was sprinkled on the door.

(3) The use of a pillar, a survival of the Canaanitic mazzebôth (Deut. xii, 3), may be seen at the shrine of Nebi Saidûn, or the prophet Sidon, in the city of that name. Sacrifices are killed so that the blood spurts on the lower part of the pillar.

(4) The Virgin is identified with a Weli, at her fountain in Nazareth, and vows are made in her honor. She is called en-Nasariyeh, or Nazarine (fem.).

(5) The Moslem shrine of St. George, known as Chudr, in Beirût, is visited by the most aristocratic people of that city. Barren women bathe in the sacred water of the well in the enclosure. The "blessing," or procreative power of Chudr, is in the water. He makes the marriage fruitful, and sons born are said to be called Chudr, after their real father, and belong to him.

(6) At the Greek shrine of Seyide, or en-Nuriyeh, in Beirût, sacrifices are slain on the threshold. It is visited by all sects, including Jews, except Protestants. Many barren Moslem women go to this church and say, "Oh please, Nuriyeh, give me a child!"

(7) There is a sacred tree in Beirût, called 'Ali Ibn 'Alam. The Moslems slaughter sacrifices near the tree, and step over the blood. Those needing healing get recovery by sleeping under the tree.

(8) It is customary, at Sidon, Beirût, Juneh, and doubtless other harbors of the Levant, as it was among the ancient Greeks, to offer sacrifices to the God of the Sea on launching a new boat or ship. The neck of a sheep is laid on the prow, its throat cut, so that the blood runs into the water, and the victim often thrown into the sea as a sacrifice to St. George, or some other local divinity.

It is very clear that most, perhaps all, rites of the ancient religion survive in Europeanized centres of Syria, and that this ancient religion, in some form, is still a mighty power among the great majority of those who profess ancient Christianity or Islam.

Remarks were made by Dr. Bill, and by Professor Curtiss in reply.

Professor J. H. Wright read a letter from W. R. Thayer calling attention to the proposed celebration of the six hundredth anniversary of Petrarch's birth at Arezzo next June, and asking for American contributions toward the monument to be erected in commemoration of this event. Either Mr.

W. R. Thayer, of Cambridge, Mass., or Professor Richard Norton, of the American School of Classical Studies in Rome, will forward subscriptions. The following motion was unanimously adopted: "*Resolved*, That this meeting of the Archaeological Institute desires to express its hearty sympathy with the celebration, to take place at Arezzo, of the six hundredth anniversary of the birth of Petrarch, poet, classical scholar, and archaeologist."

3. Mr. Charles R. Morey, of Princeton University, *The Christian Sarcophagus in S. Maria Antiqua*.

The sarcophagus was discovered in April, 1901, in S. Maria Antiqua near the Forum. It has been published by Marucchi in the *Not. Scavi*, and afterward in the *N. Bull. Arch. crist.* 1901, pp. 206-216. His publication is very unsatisfactory, because the decoration is incompletely described, even to leaving out an important detail, its relation to other monuments not pointed out, save when such comparisons serve Marucchi's argument, and his interpretation of the scenes extravagant.

The scenes on the sarcophagus, beginning at the right, are as follows: two fishermen holding a net between them; the 'Baptism of Christ'; the 'Good Shepherd'; a group consisting of a seated figure reading a scroll, and a woman in the attitude of an *orans*, or praying figure, both with faces only blocked out and never finished; the 'Story of Jonah,' consisting of, from left to right, a seated sea-god holding a trident, Jonah's ship with two sailors, the monster, and Jonah reclining under the gourd vine, which takes the form of an arbor. On top of the arbor are three sheep.

The fishermen and 'Baptism,' being water-scenes, are used to balance the 'Story of Jonah.' The 'Baptism of Christ' is probably the earliest to occur on sarcophagi. The seated figure and *orans* are borrowed from pagan art, being the old philosopher and listening woman Christianized. The marine genius is not the only pagan element in the 'Story of Jonah'—the sheep above Jonah's arbor being another. They are Endymion's sheep, left in by an artist who was more used to carving sleeping Endymions than the sleeping Jonahs, which were modelled on the former scenes. The reefed sail is uncommon on sarcophagi, but is found in the catacomb-frescoes. Another survival of catacomb tradition which soon disappeared on the sarcophagi is the dove at the feet of the *orans*, a detail which escaped Marucchi. This group is almost exactly paralleled

on a Lateran inscription. The trees in the background of the decoration serve to separate the scenes, being thus the precursors of the later columns and arcades.

Marucchi compares the fishermen and 'Baptism' to the fresco of the 'Baptism of Christ,' coupled with a fisherman, in the Sacrament Chapels of S. Callisto, and thinks that the same symbolism was intended in both cases, namely, the conversion and baptism of the believer. This allegory is continued by the 'Story of Jonah,' which symbolizes his resurrection after death, and, in the central group, which he considers to be the *orans*, seated reading figure and the 'Good Shepherd.' The seated figure is the defunct reading the Scriptures and enjoying the fruits of his righteousness in Paradise, comforted, on the one hand, by the Church of the Saints, the *orans*, and Christ its Head, the Good Shepherd.

The significance he attaches to the fishermen and 'Baptism' is hard to admit, as the resemblance to the Callistan fresco is not strong, the scenes are conventionally separated by a tree, and it is more reasonable to suppose them put together to balance the Jonah-story. To Marucchi's interpretation of *orans*, seated figure, and 'Good Shepherd' may be objected that the three do not form the central group, which is composed of the *orans* and reading figure only; that the *orans*- and dove-type is regularly used in the catacombs to indicate the deceased; and that the unfinished faces show that the figures were intended for portraits.

The sarcophagus is only large enough for one; hence the *orans* and dove, probably, were to represent the prospective occupant, while the seated figure was to be given the features of her husband, or other male relative, who might have bought the sarcophagus. Examples of this representation of living relatives along with the deceased are frequent. The use of this group as a portrait-group helps to explain other imitations of the old philosopher and listening woman on Christian sarcophagi.

The sarcophagus is a very interesting example of the transition from the third-century style to that of the fourth-century, and seems to show a time when Christian monuments were needed in greater numbers than there were Christian sculptors to make them. Hence the pagan hand which betrays itself in the sea-divinity and the sheep on Jonah's arbor, and in the dependence on catacomb-types, as in the *orans* and the reefed sail on Jonah's ship. We are reminded of the later style by the introduction of the 'Baptism' and the division of the scenes. On the whole, our monument deserves to rank as one of the most important of Christian sarcophagi, not

only because of its interest and the aid it gives us in explaining groups like the central one, but also on account of the unquestionable proof it affords for the use of the *orans* as a portrait.

Remarks were made by Professor J. H. Wright.

4. Dr. Charles Peabody, of Cambridge, Mass., *The Archaeological Explorations of 1903 in the Foothills of the Ozark Mountains, undertaken by Phillips Academy, Andover.*

In the spring of 1903 the Department of Archaeology of Phillips Academy, Andover, Mass., undertook the exploration of a rock-shelter in McDonald County, Mo. It is situated, opening to the southwest, in the slope of a hill leading from the bottom-land of Little Sugar Creek to a plateau 60 m. above it. The rock-shelter is called Jacobs' Cavern, from the discoverer of its archaeological importance, Mr. E. H. Jacobs, of Bentonville, Ark. The cavern is 23 m. broad at the opening, and 14 m. in depth. When discovered, it was filled to within 2 m. of the roof with ashes. Upon the removal of this layer of ashes an underlying stratum of brownish clay of decomposed limestone was found; under this was the true limestone floor. The ashes varied in thickness from $\frac{1}{2}$ m. to $1\frac{1}{3}$ m.; the clay was about 1 m. thick. In the ashes were found implements of flint, sandstone, and bone, thousands of unfinished and incomplete implements, flint flakes, and some fragments of pottery; also six human burials and many hundred animal bones. At the back of the cavern stands a row of stalagmites which appear filled with ashes, charcoal, flint chips, and broken animal bones from the level of the top of the clay stratum to that of the top of the ash stratum; there was thus formed in cases a compactly cemented mass. Near the entrance to the cavern are large rocks bearing a polish of great brilliancy, probably due to friction with the greasy bodies of men or their clothing of skins. The evidence of the specimens points to Indian occupation, which must have been of protracted duration, from the quantity of ashes and the size of the stalagmites under the level of the ashes.

Remarks were made by Professor Kelsey.

WEDNESDAY, DECEMBER 30. 3 P.M.

1. Dr. A. S. Cooley, of Auburndale, Mass., *Discovery of the Macedonian Tomb at Chaeronea.*

The speaker gave a brief account of the work at Chaeronea in the fall of 1902 and winter of 1903, based on materials contributed

by Dr. George Soteriades, who conducted the excavations for the Greek Archaeological Society. This work included the restoration of the base of the Lion, which has now been put together and set up, and the discovery of the tomb of the Macedonians who fell at Chaeronea in 338 B.C.

An examination of the supposed tomb near Chaeronea proved this to be a tumulus over *panarchaic* graves, with Roman remains above. The bodies in these oldest graves were interred, and not cremated. After careful investigation and mapping, this mound was left for a more convenient season, and Dr. Soteriades then excavated a much larger mound about two miles to the east. Here, at a depth of about 22 feet, in the centre of the mound, he found a heap of coals, ashes, parts of iron lances and swords, and fragments of vases of the fourth century B.C. These seem to prove that the mound is the one in question, covering the Macedonian dead of 338 B.C.

Its location so far to the east of Chaeronea disturbs former theories of the battle. The view of Curtius was proved untenable from the topography before the excavation of the mound, and a more natural line of battle suggested, — from Chaeronea to the bridge over the Cephissus near Mt. Acontium. But since the identification of the great mound with the tomb of the Macedonians; Dr. Soteriades has announced a new theory, as follows: The battle took place some distance east of Chaeronea, between the base of Mt. Thurium and the Cephissus, whither the allied Greek forces had retired. The Macedonians were buried on the field, under this mound; the bodies of the Theban Sacred Band were carried to the cemetery of Chaeronea, and buried near the highway, where their monument, the Lion, would be conspicuous. This position was a stronger one for the Greeks than that at Chaeronea, as Mt. Thurium protected their left wing, while no passage of an ancient writer forces us to locate the battle at Chaeronea itself. After the battle the Greeks retired to Lebadeia, and not within the walls of Chaeronea.

2. Professor F. B. Tarbell, of the University of Chicago, *Are the Reliefs of the Arch of Titus Examples of Illusionist Art?*

Professor Wickhoff, in his stimulating essay on Roman Art, bestows enthusiastic praise on the two reliefs which are placed within the passage-way of the Arch of Titus. Especially the one which represents the spoils of the Temple of Jerusalem appears to Professor Wickhoff to produce, in an extraordinary degree, that illusion of reality which, according to him, is the highest attainment of plastic, as of pictorial, art.

In truth, however, this relief does not possess in any high degree the quality claimed. For, first, the procession appears to be coming into collision with the corner of the arch represented at the extreme right of the design. Secondly, the heads in the second plane rise above those in the first, and those in the third above those in the second, while the corresponding feet are all on the same level. The appearance thus presented is almost impossible. Thirdly, the position of the walking figures, though much truer to fact than in some classic examples, *e.g.* the Parthenon Frieze and the Ara Pacis Augustae, are yet distorted after a fashion common in Greek art, *e.g.* in the 'Iris' of the Parthenon and in one of the daughters of Niobe. The deviation from truth is sufficient to impair, for a well-trained spectator, the illusion of reality.

Remarks were made by Professor Marquand, and by Professor Tarbell in reply.

After this paper, Professor Seymour gave an informal account of a recent visit to sites of archaeological interest in western Asia Minor. Remarks were made by Professor Richardson and Dr. Bill, who had accompanied him in this visit.

3. Professor George D. Kellogg, of Williams College, *The Use of the Floating-ship Motive in some Ancient and Renaissance Fountains.*

The motive of a floating ship as a fountain decoration appears in the large marble fragment in the Magazzino Comunale on the Celio in Rome. It represents the prow of a vessel, with a boar's head for the rostrum, and with openings for jets of water in the heads of two sea-animals in relief on the sides. Visconti (*B. Comm. Roma*, 1882, pp. 63-71), who dates it in the Flavian period, illustrates the use in two ways. If the fragment was of a prow only, an inscription from Lanuvium (*Not. Scavi*, 1881, p. 139) would parallel the use of rostra in a fountain. If the fragment were once part of a whole vessel, there is a notice of what seems to have been a similar motive in a fountain or nymphaeum of the baths of Caracalla, marble fragments of which are described by Flaminio Vacca (*ap. Fea Misc.* p. lxiv, n. 23) as of a little vessel sailing toward an islet.

In the big fountains of the Villa Lanti at Bagnaia there are four small barks, made to look as if floating on the surface, and in Bramante's fountain in the Vatican Gardens there is the Galera Venetiana, with masts and rigging much resembling a toy yacht. Among larger floating vessels may be cited that in the Villa Aldobrandini

at Frascati, and 'La Barcaccia' at the foot of the Spanish Steps in Rome. These two much resemble the boat made by Ligorio for the Villa D' Este at Tivoli, where the model, as is shown by the miniature Rome (La Rometta) in the background, was the island in the Tiber, which had, in antiquity, been walled in so as to look like a ship moored in the harbor. Ligorio and his contemporaries were fond of drawing fanciful restorations of the Insula Tiberina.

In a simple fountain, where the central structure is low and, as it were, almost floating on the water, there is, at a short distance, a resemblance to a floating vessel. This part of the fountain is often modified, and jets of water come from floating objects, such as dolphins, tritons, etc. That some one should have hit on the idea of a floating vessel is not strange. We know (Pliny, *N.H.* XVI, 33, 140) that the Roman landscape artists used to trim cypress trees to look like vessels (*classes*), and the rostrum, or ship's prow, was not uncommon as a decorative motive on columns, bases of statues, and buildings, and was used in a fountain at Lanuvium. It is possible that nymphaea like that on the Palatine, where the highly ornamented elliptical island resembles a floating barge, might have given a suggestion, or the form of the Insula Tiberina may have influenced the ancients, as it certainly did the sixteenth-century architects. At any rate, the motive is a perfectly natural one for a fountain.

Remarks were made by Professor Platner, and by Professor Kellogg in reply.

4. Professor Francis W. Kelsey, of the University of Michigan, *Vesuvius and Pompeii*.

The speaker presented some of the results of an investigation dealing with the phenomena of the earthquake of the year 63 in Campania, the form of Vesuvius before the eruption of 79, and the causes of death in the destruction of Pompeii. The paper will be published in full later.

WEDNESDAY, DECEMBER 30. 8 P.M.

The Annual Address, by Professor Rufus Byam Richardson, recently Director of the American School of Classical Studies at Athens, *A Quarter Century of Mycenology*.

The excavation of Mycenae was more important than that of an ordinary Greek city, because it revealed a buried civilization, which forms a background to the splendid Hellenic civilization.

Mycenology, born in 1876, was not still-born. Its birth was accompanied with the beating of drums and the blare of trumpets. Schliemann boasted of having found the veritable body of Agamemnon. In reality his achievement was greater than that. Although he lacked the scientific method, by his faith and works, backed by a liberal fortune, he made the greatest discovery of his age. He judged that he had found the bodies of Agamemnon and his followers, because he saw upon them signs of a hasty and contemptuous burial, with a mere pretence of cremation. The number of the graves also, he thought, corresponded to the narrative of Pausanias. Dörpfeld and Schuchhardt showed that there were no signs of care-less burial and that not a trace of any cremation appeared. The graves were shown, by the difference of masks and other objects in them, to have stretched out over a period of at least half a century. They therefore could not be the graves mentioned by Pausanias, which Schliemann had sought.

After an unsuccessful attempt to identify the great beehive tombs with these graves, a suggestion of Belger gained currency. This was to the effect that a *tradition* of Pausanias's time pointed out the spot where Schliemann had dug as the burial place of Agamemnon and his party. Von Moltke had said, "Eine Erzählung kann geschichtlich unwahr und örtlich vollkommen genau sein." As a fact, the beehive tombs are likely to be the burial places of the great Pelopid dynasty; and the pit graves discovered by Schliemann, to belong to the Perseids.

Furtwängler and Löschke deserve credit for their study and classification of Mycenaean pottery. Reichel's studies on the equipment of the Mycenaean warrior and on Mycenaean religion deserve mention. Schuchhardt's *Schliemann's Ausgrabungen* possesses merit enough to supersede, with most readers, the bulky volumes of Schliemann. Tsountas excavated the stately acropolis of Mycenae with the royal palace at the top, excavated also a hundred rock-cut tombs and several beehive tombs, and carried on work at Mycenaean centres all over Greece. He discovered the famous gold cups at Baphio, near Sparta. His excellent work on *Mycenae and Mycenaean Civilization*, enlarged and published by Manatt in English in 1897, well summed up our knowledge on that subject at the time of publication. Some of its matter was, and is, a subject of controversy.

The date of Mycenaean bloom has been determined, from Egyptian objects found at Mycenae and Mycenaean objects found in Egypt, to be from 1500 B.C. to 1100 B.C. But Mycenaean civilization was not

extinct in Greece until 800 B.C., as is shown by the "gold find" of Aegina.

As the makers of Mycenaean art there have been put forward Carians, Phoenicians, Dorians, Pelasgians, and others, while the Achaeans, in the view of many, still hold the field. A view that is now gaining currency is that, by whatever name the makers were once called, they were *Greeks*, and that the art that came into being in the seventh and sixth centuries was a renaissance of the Mycenaean.

Since 1900 the centre of gravity in Mycenaean studies has shifted to Crete, where Schliemann had "hoped to discover the original home of Mycenaean civilization." It was reserved for Evans and Halbherr to put their like faith to the test,—the former at Knossos and the latter at Phaestos.

Even if Crete is not the original centre, it is a more important centre than Mycenae, for two reasons: (1) Its long and unbroken continuity of development; (2) The surpassing excellence of the art of the period of bloom. The lack of fortification walls shows that these cities controlled the sea. Their palaces were superb enough to invite attack, and yet they stood for many centuries. They make the palace of Mycenae seem like that of some vassal of him who ruled at Knossos. Whether the extremely early dates assigned by excavators to some of their objects will stand must be left to time and much careful discussion.

THURSDAY, DECEMBER 31. 10 A.M.

1. Professor Henry A. Sanders, of the University of Michigan, *Evidence with Regard to the Manuscript Variations in the Epitome of Livy*.¹

Instances in which two or more imitators of the Epitome of Livy seemed to agree in presenting a common variation from the established form of it were noted in the author's previous article on *The Combination of Sources in Livy* (Berlin, 1897), and by Reinhold, *Das Geschichtswerk des Livius als Quelle späterer Historiker* (Berlin, 1898). These cases were first discussed, and several of them shown to be due to combination of sources by some one of the later historians. In other cases the variation is found only in the Periochae Livii, and is to be explained as a change made by its author or in the

¹ This paper will be published in full in the *University of Michigan Studies*, Vol. I.

manuscript of the Epitome used by him. In one case, however, neither of these explanations is admissible, as five of the imitators of the Epitome show the same variation from the form vouched for by four other imitators. The speaker then discussed a large number of new instances of the same phenomenon, and came to the conclusion that they were due to changes made at first in individual manuscripts of the Epitome, but later borrowed for other manuscripts, according to the wish of the copyists.

Remarks were made by Professor Kelsey, and by Professor Sanders in reply.

2. Professor Thomas D. Seymour, of Yale University, *The Homeric Poems as a Source of Archaeological Knowledge*.

While the mythical, historical, and imaginative elements of the Homeric poems cannot easily be distinguished, one from another, they may be separated from the archaeological elements. A comparison of the Homeric poems with those of Vergil and Apollonius, and the analogy of early painters and the dramatists, favor the belief that the Epic poet, in general, depicted the life of his own time, though he used freely old material, and was under the influence of convention.

Remarks were made by Professors Richardson and J. H. Wright and Dr. Cooley, and by Professor Seymour in reply.

3. Dr. A. S. Cooley, of Auburndale, Mass., *Notes on the American Excavations at Corinth*.

4. Professor W. N. Bates, of the University of Pennsylvania, *Scenes from the Aethiopis on a Black-figured Amphora from Orvieto*.

The vase discussed in this paper is a black-figured amphora put together from fragments acquired in Orvieto, a few years ago, by the Free Museum of Science and Art of the University of Pennsylvania. It has painted upon it, in two panels, the death of Antilochus and the rescue of the body of Achilles by Ajax, both of which scenes are taken from the Aethiopis. Most of the figures are identified by inscriptions. In the Antilochus scene there is a Greek named Euphorbus, not otherwise known; and in the other scene Menelaus, not Odysseus, protects Ajax. In this scene, also, there is an Aethiopian named $\Lambda \rho \alpha \varsigma \omicron \varsigma$, a name not found elsewhere. The writer argued, from the style of the painting, the care in details, the use of

palmettes at the handles, and other evidence, that the vase was probably the work of the Attic vase painter, Amasis.

5. Dr. P. C. V. Baur, of Yale University, *The Palace of Thetis on the François Vase*. (Read by Professor Kellogg.)

In this paper Reichhold's restoration of the palace of Thetis on the François vase was discussed. Reichhold (Furtwängler and Reichhold, *Griechische Vasenmalerei*, p. 9) gives, very successfully, in perspective what Clitias the vase painter attempted to draw. A comparison between this palace of Thetis and the normal Doric temple shows that it is not strictly of that order. Wherever it does not agree with the normal Doric style, it is like the archaic remains of Paestum and Metapontum, which are Achaean colonies. A careful analysis of the architectural details of the house of Thetis proves that Clitias held to an actually existing style of architecture, which Puchstein aptly calls Achaean, because it is found in the Achaean colonies of Magna Graecia. Peculiar to this style is a moulding which differs from the Doric, Ionic, and Lesbian cymatia, but which resembles a cymatium frequently found on Egyptian monuments. It occurs not only on the palace of Thetis, but also on the stele of Lamptrae and on some pedestals of votive statues found on the acropolis at Athens. We may safely conclude, therefore, that at Athens in the seventh century B.C. the Achaean style of architecture was in vogue.

The following papers were read by title:

1. Mr. W. H. Hyde, of Ithaca, N.Y., *Lysippus as a Worker in Marble*.

2. Professor Mitchell Carroll, of Columbian University, *Observations on the Harbors and Walls of Ancient Athens*.

O. Fischbach (*Wiener Studien*, XV, 1893, pp. 161-191) has shown conclusively, by numerous citations from each author, that Pausanias was profoundly acquainted with the work of Thucydides, and in many passages made direct use of it, so much so that he manifests an especial preference for Thucydidean turns of expression. Pausanias doubtless consulted Thucydides constantly during his sojourn in Athens, and he had the benefit of a tradition, as handed down by local guides, based primarily on the statements of the historian. Hence, when Pausanias cites Thucydides directly or indirectly, we should assume that the statements of the two authorities are

consistent, and thus endeavor to arrive at results that will most satisfactorily solve the problems at issue. This principle of interpretation will perhaps enable us to arrive at the truth in a few disputed questions regarding the harbors and Long Walls of Ancient Athens.

I. *Harbors*.—Compare the two statements: Thucyd. I, 93, 3, Ἐπεισε δὲ καὶ τοῦ Πειραιῶς τὰ λοιπὰ ὁ Θεμιστοκλῆς οἰκοδομεῖν . . . νομίζων τὸ χωρίον καλὸν εἶναι, λιμένας ἔχον τρεῖς αὐτοφνεῖς κ.τ.λ., and Paus. 1, 1, 2, Θεμιστοκλῆς δὲ ὡς ἤρξε, τοῖς τε γὰρ πλέουσιν ἐπιτηδεύτερος ὁ Πειραιεὺς ἐφαίνετο, οἱ προκείμεναι καὶ λιμένας τρεῖς ἀνθ' ἑνὸς ἔχειν τοῦ Φαληροῦ, τοῦτό σφισιν ἐπίνειον εἶναι, κατεσκευάστο κ.τ.λ.

As Fischbach shows, Pausanias derived his information from Thucydides, yet Ernest Gardner (*Ancient Athens*, p. 562) says that Thucydides referred to the great harbor (Piraic) on the northwest side and the two smaller inlets (Munychian and Phaleric) on the southwest, while "Pausanias points out the superiority of the northwest harbor in the narrower sense, that is to say, the great northwest harbor, because it contains as organized in later times three harbors, Cantharus, Zea, and the commercial harbor of Emporion." Gardner in this latter statement follows Leake, who, however, confines also Thucydides' statements to the great harbor, and names the three supposed harbors Cantharus, Zea, and Aphrodisium. Yet there is no inconsistency between Thucydides and Pausanias. Both apply the word Piræus to the entire peninsula, and a proper study of the latter shows that there is no authority whatever for considering three divisions of the great harbor meant whenever there is reference to three harbors. In the next sentence Pausanias adds: καὶ νεὼς καὶ ἐς ἐμὲ ἦσαν οἶκοι καὶ πρὸς τῷ μεγίστῳ λιμένι, τάφος Θεμιστοκλέους, which is manifestly a reference to the great harbor of Piræus as a whole; and, after some account of monuments in the Piræus, he continues in I, 1, 4, ἔστι δὲ καὶ ἄλλος Ἀθηναίους ὁ μὲν ἐπὶ Μουνυχίᾳ λιμὴν . . . ὁ δὲ ἐπὶ Φαλήρῳ; i.e. the second of the three is the harbor usually called Zea or Pashalimini, south of the hill of Munychia, and the third what is commonly known as Munychia or Fanari, southeast of the hill.

A study of the other passages cited by Milchhoefer (*S.Q.* p. cv) strengthens this view, and shows that when subdivisions of the great harbor are suggested the reference is to parts of the coastland bordering upon the harbor, not to the harbor itself. Thus, the passage on which Leake and Gardner chiefly rely (Schol. Ar. *Pax*, 145) recognizes three harbors, all enclosed, i.e. the three mentioned, and names the chief divisions about the great harbor.

As to the names of the three harbors, the largest was known as the great harbor, or by eminence the harbor of Piraeus, or Cantharus, a term applied always to the whole harbor. As to the second, in the neighborhood of Munychia, this may have been called Zea, which could not have been, as Gardner and Leake hold, a portion of the great harbor, but was applied to one of the three enclosed harbors. The third, adjacent to Phalerum, was doubtless from earliest times known as the harbor of Phalerum, as distinguished from the roadstead or open Bay of Phalerum. There is no reason whatever for taking Ἀφροδίσιον or Ἐμπορίον as names of harbors, these names being merely applied to sections of the land about the great harbor.

II. *Site of Ancient Phalerum.*—Thus the passage of Pausanias affords strong evidence as to the disputed site of ancient Phalerum, being adjacent to the third and smallest harbor. Most recent authorities agree with Ulrichs in placing Phalerum near a low, rocky height crowned by the chapel of St. George, at the southeast corner of the Bay, basing their position chiefly on Paus. I, 1, 2, Φάληρον δὲ, ταύτη γὰρ ἐλάχιστον ἀπέχει, τῆς πόλεως ἢ θάλασσα, and Paus. VIII, 10, 4, Ἀθηναίοις μὲν δὴ σταδίους εἴκοσιν ἀφέστηκε τῆς πόλεως ἢ πρὸς Φαλήρῳ θάλασσα, as the point above mentioned is the nearest point of the coast line to the city. The latter statement is obviously inaccurate, as it is at least thirty stadia from the city wall to St. George, and in the former Pausanias was doubtless referring merely to the harbor nearest the city. Milchhoefer (*Karten v. Att.* II, 2), on the other hand, would place Phalerum near the chapel of the Savior (Soter), which stands on a conspicuous rocky elevation about $1\frac{1}{4}$ miles north of St. George, and about fourteen hundred yards from the sea. My interpretation of Pausanias, however, with Strabo, IX, 398, μετὰ δὲ τὸν Πειραιᾶ Φαληρεῖς δῆμος ἐν τῇ ἐφεξῆς παραλίᾳ· εἶθ' Ἀλιμούσιοι κ.τ.λ., leads to the conclusion that the deme Phalerum occupied the ground around the harbor of Phalerum and extended along the Bay of Phalerum in the direction of St. George, where it was succeeded by Halimus, which embraced, according to Milchhoefer, the coast land between St. George and St. Kosmas further south. Paus. I, 1, 5 states that Cape Colias is twenty stadia distant from the objects mentioned in Phalerum. The site of Cape Colias is also disputed, and the arguments for locating Colias at St. George, which is about twenty stadia distant from the southwest corner of the Bay, lend additional proof to the site selected for Phalerum. Leake, Gardner, and Angelopoulos (*Περὶ Πειραιῶς καὶ τῶν λιμένων αὐτοῦ*, Athens, 1901), in contrast to the rest of the topographers, thus locate Phalerum, but do not avail themselves of the conclusive evidence of Pausanias.

III. *The So-called Third Long Wall.* — Most recent topographers have assumed the existence of a third Long Wall, called the Phaleric, in addition to the two Long Walls to the Piræus, though no remains of any third Long Wall exist now or are recorded as ever having existed, nor has its utility been satisfactorily explained. All ground for such an assumption is removed if old Phalerum is located on the western rather than the eastern side of the Bay, and the Phaleric Wall is made parallel with the Piraic and identified with the Southern Wall. Pausanias (I, 2, 2) doubtless had in mind Thucydides' statements (Thuc. I, 107–108; II, 13, 6) regarding the walls between city and port, and the fact that he, as all other classical authors (Xenophon, Aeschylus, Andocides, Diodorus, Livy, Nepos) does not hint at the existence of a third, indicates that the so-called Phaleric Wall from Athens to the east of the Bay has existed only in the minds of modern topographers, notably Wachsmuth and Curtius.

The following members of the Institute were present at the meeting:

Professor Frank Cole Babbitt, Trinity College, Hartford, Conn.; Professor William N. Bates, University of Pennsylvania, Philadelphia, Pa.; Professor Demarchus C. Brown, Butler University, Indianapolis, Ind.; Mrs. D. E. Carson, Madison, Wis.; Professor Cleveland K. Chase, Earlham College, Richmond, Ind.; Dr. Arthur S. Cooley, Auburndale, Mass.; Professor Samuel Ives Curtiss, Chicago Theological Seminary, Chicago, Ill.; Professor Walter Dennison, University of Michigan, Ann Arbor, Mich.; Professor W. H. Goodyear, Brooklyn Institute, Brooklyn, N. Y.; Mr. Peter M. Hitchcock, Cleveland, O.; Mr. L. E. Holden, Cleveland, O.; Professor J. H. Huddilston, University of Maine, Orono, Me.; Professor George D. Kellogg, Williams College, Williamstown, Mass.; Professor F. W. Kelsey, University of Michigan, Ann Arbor, Mich.; Professor Allan Marquand, Princeton University, Princeton, N. J.; Professor Richard Parsons, Wesleyan University, Delaware, O.; Professor James M. Paton, Wesleyan University, Middletown, Conn.; Dr. Charles Peabody, Cambridge, Mass.; Professor John Pickard, University of Missouri, Columbia, Mo.; Professor Samuel Ball Platner, Adelbert College, Cleveland, O.; Professor Louise F. Randolph, Mt. Holyoke College, South Hadley, Mass.; Professor Rufus B. Richardson, Brooklyn, N. Y.; Professor Henry A. Sanders, University of Michigan, Ann Arbor, Mich.; Professor Henry S. Scribner, Western University of Pennsylvania, Allegheny, Pa.; Professor William J. Seelye, University of Wooster, O.; Professor Thomas D. Seymour, Yale University, New Haven, Conn.;

Mr. George R. Swain, Bay City, Mich.; Professor Frank B. Tarbell, University of Chicago, Chicago, Ill.; President Charles F. Thwing, Western Reserve University, Cleveland, O.; Mr. Edward L. Tilton, New York, N. Y.; Mr. Mars E. Wagar, Cleveland, O.; Professor A. M. Wilcox, University of Kansas, Lawrence, Kan.; Rev. Dr. James D. Williamson, Cleveland, O.; Professor Harry L. Wilson, Johns Hopkins University, Baltimore, Md.; Professor John H. Wright, Harvard University, Cambridge, Mass.

The sessions were also attended by the following persons, teachers in colleges or universities or former members of the Schools at Athens and in Rome, but not members of the Institute:

Dr. Clarence Powers Bill, Western Reserve University, Cleveland, O.; Professor E. W. Clark, Ripon College, Ripon, Wis.; Dr. C. N. Cole, Oberlin College, Oberlin, O.; Professor Thomas Fitzhugh, University of Virginia, Charlottesville, Va.; Professor Charles B. Martin, Oberlin College, Oberlin, O.; Dr. Charles R. Morey, Princeton University, Princeton, N. J.; Professor J. C. Rockwell, Buchtel College, Akron, O.; Miss Mary G. Williams, Mount Holyoke College, South Hadley, Mass.; Professor George F. Wright, Oberlin College, Oberlin, O.

ARCHAEOLOGICAL NEWS¹

NOTES ON RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS

JAMES M. PATON, *Acting-Editor*
Wesleyan University, Middletown, Conn.

GENERAL AND MISCELLANEOUS

CHINESE PORCELAIN IN EUROPE. — A manuscript of Gaignières contains a painting of a ewer of white porcelain, richly decorated, which is shown by the device on the foot to have belonged to Jeanne I, who married André of Anjou, king of Jerusalem, Naples, and Sicily in 1333. The accuracy of the drawing makes it clear that this is a piece of the rare Ting-Yao ware, celebrated in China from 960–1279 A.D. It shows that Chinese porcelain was known in Europe before its general introduction by the Portuguese in 1518. (DE MELY, *C. R. Acad. Insc.* 1903, p. 234.)

REPORT ON THE FRENCH SCHOOLS AT ATHENS AND ROME. — In *C. R. Acad. Insc.* 1903, pp. 440–456, is a report by MAXIME COLLIGNON on the work of the students in the French Schools at Athens and Rome. The report deals chiefly with the papers submitted. It may be noted that at Athens Mr. Toudouze has begun the preparation of a catalogue of the sculptures in the Acropolis Museum. G. Lefebvre has devoted himself to Hellenism in Egypt and particularly to the study of a temple excavated by Jouguet and himself near Magdôla. It was first dedicated to the Thracian god, Heron, who was later supplanted by the Dioscuri, while still later there appears a cult of Serapis and Isis, and in the ruins was found a statuette of Harpocrates. At Rome Mr. Merlin has prepared a study of the foreign cults on the Aventine during the Republican period, which is to form part of a complete history of that district. The origin and growth of

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor FOWLER, Editor-in-charge, assisted by Miss MARY H. BUCKINGHAM, Professor HARRY E. BURTON, Professor JAMES C. EGBERT, JR., Professor ELMER T. MERRILL, Dr. GEORGE N. OLCOTT, Professor JAMES M. PATON, and the Editors, especially Professor MARQUAND. In Professor FOWLER's absence, these departments are conducted by Professor PATON.

No attempt is made to include in the present number of the JOURNAL material published after January 1, 1904.

For an explanation of the abbreviations, see pp. 135, 136.

these cults are explained by showing that the Aventine was occupied by plebeians and foreign merchants, and formed the commercial centre of Rome, even though outside the *pomerium*.

REPORT OF THE IMPERIAL GERMAN ARCHAEOLOGICAL INSTITUTE FOR 1902-03. — Of the publications supported wholly or in part by the Institute, substantial progress has been made on the Antike Sarcophage, Antike Terracotten, Campana-reliefs, Römische Militärreliefs, Antike Schnitzereien in Elfenbein und Knochen, Karten von Attica, Attische Grabreliefs, and the *Ephemeris epigraphica*. The Roman branch has issued Vol. XVII of the *Mitteilungen*, the index to Vols. I-X, and Delbrück's *Drei Tempel am Forum holitorium*, and has nearly ready the first volume of the description of the Vatican sculptures. The library has installed the Platner library and fitted up a room for work in Christian art, and by means of the Bäder fund has had Bufalini's large plan of Rome (1551) photographed in full size. The Athenian branch has issued the delayed Vols. XXVI and XXVII of the *Mitteilungen*, for 1901 and 1902, and has made progress on the index to Vols. 1-25, on the Akropolis vases, and the 'Funde im Kabinheiligtume.' Dr. Dörpfeld's outdoor lectures, which were given every Saturday to a large gathering, were repeated on another day to the German specialists. The final drawings and notes of the excavations at Paros were made on the spot, work was carried on at Pergamon from September to November, and single journeys for work or exploration were made to various parts of Asia Minor and to Thera. The new Romano-Germanic Commission of the Institute has begun its work with great vigor. The newly appointed director, Dr. Dragendorff, supervised excavations at Haltern in Westphalia (fortifications of the early emperors), at Frankfort-on-the-Main, on the Roman water-mains system at Trier, the newly discovered Roman amphitheatre at Metz, and the amphitheatre at Xanten, Lower Rhine, and visited Kneblinghausen (Westphalia), Wiesbaden, Homburg, Mainz, Darmstadt, and Düsseldorf. Parts two and three of Ohlenschläger's *Römische Überreste* in Bayern were prepared for publication. (*Arch. Anz.* 1903, pp. 72-76.)

GREENLAND. — **Early Icelandic Settlements.** — *The Nation*, September 3, 1903, contains a summary account of the explorations made by Captain Daniel Bruun of Denmark among the Icelandic settlements of the tenth century in Greenland, which are generally believed to have been destroyed by Eskimos in the fifteenth. In 1894 the easternmost settlement, Austurbyggd, was visited. This year he has found the sites of over sixty of the ninety farmsteads forming the other settlement, Vesturbyggd. The foundations are easily traceable and much of the stonework is still standing. The ruins of a church exist, and in the churchyard some skeletons were found. Hunting huts and the dairy huts on the high pastures were also identified.

MEXICO. — **Ancient Ruins.** — *Records of the Past*, II, 1903, pp. 223-224, contains an account from the *Mexican Herald* of a group of ruins near Tepeyahualca, in the state of Puebla. They consist of a series of pyramidal constructions surrounding courts, and connected by avenues, while there are trenches and solid walls for defence. Early pottery, knives of stone and obsidian, and sculptures in relief are said to be plentiful.

NECROLOGY. — **Hans von Prott.** — On September 12, 1903, Hans von Prott died at Athens. A pupil of Usener and Bücheler, he chose, during

his student days at Bonn, the history of the Greek religion as the subject of his life work. Other duties had interfered with the prosecution of his investigations, but he had recently made discoveries which seemed to him of far-reaching import not only for the Greek religion but also for the solution of modern problems. His discoveries were to be embodied in a book entitled *Μήτρρ*, and for this he left much material, which will shortly be published. The flood of ideas which poured upon him proved too much for his nervous system. He feared the approach of insanity and took his own life. (H. SCHRADER, *Athen. Mitth.* XXVIII, 1903, pp. i-vii. See also *Berl. Phil. W.* 1903, col. 1311-1312.)

EGYPT

EGYPT EXPLORATION FUND.—**Work in 1902-03.**—The *Archaeological Report* for 1902-03 of the Egypt Exploration Fund contains as usual a full report of the progress of Egyptology, including brief mention of recent excavations, and a bibliographical review of all branches of Egyptology, including 'Graeco-Roman Egypt' by F. G. KENYON (pp. 38-52), 'Christian Egypt' by W. E. CRUM (pp. 52-67), and 'Arabic Egypt' by GEORGES SALMON (pp. 68-73). N. DE GARIS DAVIES (p. 1) copied the texts and paintings in tombs at **El Amarna** for the 'Archaeological Survey.' For the 'Graeco-Roman Branch' GRENFELL and HUNT (pp. 1-9) excavated at **Hibeh**, **Cynopolis**, and **Oxyrhynchus**. At the first two sites a number of tombs were opened, but comparatively few papyri were found. At Oxyrhynchus large quantities of papyri, including many of literary and theological interest, were found (see *Am. J. Arch.* VII, 1903, p. 362). The 'Egyptian Research Account' (pp. 14-15) excavated at **Abydos** a great hypogeum behind the temple of Seti. It was forty feet below the surface and partly filled with sand, so that it was only partially cleared. The walls contained portions of the Book of the Dead, including the rare chapter 168, and the Book of Gates. The building seems to have been built for the worship of Osiris, but its connection with the temple is still uncertain. At **Naucratis** (p. 15) D. G. Hogarth explored the large northern precinct, finding a series of chambers along the east wall with dedications to the "Gods of the Greeks," Artemis, and Aphrodite. A dedication of the last half of the fifth century was by a certain Herodotus. The southern end of the site was proved to be Egyptian, and it is certain there was a Saite town beside the Greek concession. The Fund urges increased contributions to enable it to extend its work. (See *Nation*, December 10, 1903.)

WORK OF THE FRENCH INSTITUTE IN 1902-03.—*C. R. Acad. Insc.* 1903, pp. 399-406, contains the report of Director CHASSINAT on the work of the French Institute of Oriental Archaeology at Cairo. Excavations were carried on at **Touna** and **Assiout**. At the former place A. Gombert excavated in the extensive necropolis which was used from the eighteenth dynasty to Roman times. It has, however, been extensively plundered for many years by the natives. Two Graeco-Roman cemeteries yielded little of value, though a good series of painted or gilded masks was found. The search for the necropolis of Amenophis IV was cut short by a fatal accident to M. Gombert. A remarkable stele showing Amenophis and his family was found, and a number of less important objects. At Assiout C. Palanque excavated forty tombs of the ninth and tenth dynasties. Many of these were un plundered and yielded a large collection of funeral

gifts and statuettes. The report concludes with a brief summary of the work undertaken since the transformation in 1898 of the French Mission into the French Institute.

GRAECO-ROMAN FINDS IN EGYPT.—Work has been very active, but aside from papyri not much of interest has been found. Grenfell and Hunt, at **El Hibe** and at ancient **Oxyrhynchus**, found beside papyri only a bird-trap. At **Naucratis** there were rich finds of vase fragments and a small ancient limestone stele in a style suggestive of the Didymaeon figures. The burial-ground of **Tehne et Tahûna** yielded objects important for Egyptology, but otherwise only some Greek grave inscriptions found near a quantity of Coptic gravestones. In exploring the great mass of ruins at **Hermupolis Magna** the Italians found that the place had been plundered and yielded little but papyri and a small Roman marble head of Serapis. The Germans, digging in the neighborhood of the Pyramids of **Gizeh**, found rich and beautiful Egyptian objects of the fourth and fifth dynasties. At **Gebel Abusir**, near the entrance to the Fayûm, four curious bronze vessels of the Byzantine epoch were found just under the surface. Many undisturbed Greek graves were uncovered at **Abusir**, near Sakkarah, where the manuscript of Timotheus was found last year. Three wooden sarcophagi, one with an arched top resembling a late Egyptian type, were richly furnished within and without and the contents, dating in 300-350 B.C., were undisturbed. Outside of one were the remains of a completely furnished funeral banquet. The dead had held the Attic obol in the mouth. Two fine Hellenistic bronze figures, Dionysus and a satyr, are said to have come from **Erment**, and a large marble head of a city goddess, of Hellenistic work, from **Memphis**. Pieces of a large mosaic floor from a private house, of the second or third century after Christ, represent the story of Ganymede. (O. RUBENSOHN, *Arch. Anz.* 1903, pp. 78-81; 2 cuts.)

ABUSIR.—**German Excavations.**—In the report of the Deutsche Orient-Gesellschaft, Dr. Borchardt states that he has now traced out the connection between the temple of death of King Ne-woser-re (2500 B.C.) and the neighboring pyramid, and has exposed several tombs of great interest from an architectural point of view. In the Greek cemetery, which last year yielded the papyrus of Timotheus, wooden coffins were found containing fruit, flowers, and colored ribbons. (*Athen.* October 3, 1903.)

APHRODITÊSPOLIS.—**A Greek Inscription.**—In *R. Arch.* II, 1903, pp. 50-55, SEYMOUR DE RICCI publishes from a copy of Dattari, a long (43 lines) but fragmentary decree of the people of Ἀφροδίτης π[όλις]. It is dated under a queen Berenice, who seems to be Berenice III, who reigned alone from December, 81 B.C., until the summer of the next year. The stone is broken at the bottom and both sides, and no complete restoration is possible. It seems to be in honor of a phylarch. The article contains a list of the eighteen known Ptolemaic decrees.

ASSOUAN.—**An Aramaean Inscription.**—In *C. R. Acad. Insc.*, 1903, pp. 269-276 (pl.), the Marquis DE VOGÜÉ publishes an Aramaean inscription from Assouan, now in Cairo. It is fragmentary, but contained a dedication by the commander of the garrison of Syene to a god, whose name is lost, and it is dated in the seventh year of King Artaxerxes. This is probably Artaxerxes I, so that the inscription belongs to the year 458 B.C.

BENI-HASAN. — **Exhibition.** — *Athen.* July 18, 1903, contains an account of the exhibition at Burlington House by the Beni-Hasan Excavations Committee of the antiquities discovered by Mr. Garstang. These consist primarily of wooden models illustrative of the industrial processes of the Middle Empire (c. 2000 B.C.). See *Am. J. Arch.* VII, 1903, p. 361, for an account of these discoveries.

GIZEH. — **A Necropolis of the Fourth Dynasty.** — In the *S. S. Times*, August 29, 1903, G. STEINDORFF gives a brief summary of the more important excavations in Egypt during 1903. Most of these have been already reported in the *Am. J. Arch.* The government having at last allowed foreign excavations in the pyramid plain of Gizeh, Reisner, Schiaparelli, and Steindorff began excavations, after dividing the territory. Steindorff excavated west of the pyramid of Cheops, discovering the well-preserved mastaba of an official named Uhemka (c. 2700 B.C.), with walls covered with fine reliefs. Near by was found a closely built group of smaller tombs belonging to lesser officials. In these the dead were buried in small subterranean chambers, some in wooden coffins, and many in the pits in a crouching position. Hitherto this position, with the head to the north and face to the east, has only been found in the prehistoric or very early historic tombs. Still farther west a group of still poorer brick tombs was uncovered.

THEBES. — **The Tomb of Queen Hatshepsowet.** — In *S. S. Times*, August 29, 1903, G. STEINDORFF reports that near the tomb of Thotmes IV has been discovered the tomb of Queen Hatshepsowet, sister and wife of Thotmes III, and builder of the temple of Deir-el-Bahari. Only the outer corridor has been cleared, and the opening of the inner chambers has been postponed until the present winter.

BABYLONIA

AMERICAN EXPLORATIONS. — After three years of unsuccessful endeavor to secure a firman to excavate at Ur of the Chaldees, Eridu, or Tel Ibrahim in Babylonia, Dr. Edgar J. Banks has abandoned the attempt, and Dr. John P. Peters has issued an explanatory circular to the subscribers to the fund for this expedition. (*Biblia*, XVI, 1903, pp. 212-214.) *Biblia* XVI, 1903, pp. 251-253, contains the information that the University of Chicago has been given exclusive rights to excavate the mounds at Bismaya in Central Babylonia. This is believed to be the site of Isin or Nisin. The work is to be in charge of Professor Robert F. Harper. In *S. S. Times*, January 2, 1904, H. V. HILPRECHT, writing from Constantinople, states that Dr. Banks is to excavate at Bismaya, and that the Chicago expedition has secured the mounds at Senkere, the ancient Larsam or Ellasar, in Southern Babylonia. The ruins are four miles in circumference, and inscriptions show that the city played an important part in early Babylonian history.

BABYLON. — **The German Excavations.** — F. DELITZSCH has published his address, containing an account of his visit in 1902 to the German excavations in Babylonia. He affirms that in the 235 tablets found in the recently begun excavations in Fara, three days' journey from Babylon, proof is at hand that the cuneiform system of script, a product of the Sumerian civilization, was originally developed out of a pictorial writing. He also announces the discovery of the proclamation of Cyrus issued after

the taking of Babylon, from which it appears that the city fell into the hands of the conqueror by treachery. (*Nation*, July 23, 1903.)

The report of the Orient-Gesellschaft states that at Fara different modes of burial were discovered; the body was placed in a clay sarcophagus, forced into a clay vessel, or wrapped in a mat. (*Athen*, October 3, 1903.)

The expedition to Babylon, which was at first disappointing in the small number of inscriptions discovered, has in recent months unearthed a mass of cuneiform tablets. Most of these are of a date belonging to the Persian and Greek periods. Dr. Weissbach, who has been examining the finds, reports descriptions of the sacrificial worship of the Babylonians, together with a full cosmogony. (*Nation*, October 1, 1903.)

SYRIA AND PALESTINE

BEIT-DJEBRÎN.—**Macedo-Sidonian Tombs.**—*Mith. D. Pal.* V. 1902, pp. 40-42, contains a brief account by H. THIERSCH and JOHN P. PETERS of the newly discovered graves at Beit-Djebrin, near Tell Sandahannah, the ancient Marisa. (See *Am. J. Arch.* VII, 1903, pp. 89-91, 106.)

BYBLOS.—**An Egypto-Phoenician Inscription.**—In *C. R. Acad. Insc.* 1903, pp. 378-383 (2 cuts), CLERMONT-GANNEAU publishes the inscriptions from a monument near Djebail, the ancient Gebal or Byblos. The three Egyptian cartouches contain the name and titles of Sheshonk I. The Phoenician inscription is in three lines between the cartouches. Though mutilated, it indicates that the monument was erected by Abibaal over the grave of an unknown citizen of Gebal, who had died in Egypt and later been transferred to his native land. Though early, it is certainly later than the time of Sheshonk I.

DEIR EL-QALA'A.—**A Bilingual Inscription.**—In *R. Arch.* II, 1903, pp. 29-49 (cut), S. RONZEVALLÉ publishes an inscription found by him near the temple of Ba'al-Marqod at Deir el-Qala'a near Berytus. The inscription is in Latin and Greek, and contains a dedication to Jupiter Optimus Maximus Balmarcod, Juno Regina, Juno Sima, and Caelestis Sohemia. The paper first adduces arguments to prove that Sima, also known as Sime, Semea, and Simi, is to be identified with Ashima, the goddess of Hamath (2 Kings xvii. 31), and with Semiramis, whose image is also the *σημήιον* of *De Dea Syria* 33. This goddess was the daughter of Hadad and Atargatis, identified with Jupiter and Juno. The second part of the paper justifies the expansion of C. S. into *Caelesti Sohemiae*, in the Greek *Νεωτέρα Ἡρα*, and discusses the deification of this empress.

DAMASCUS.—**Samaritan Inscriptions.**—In *Mith. D. Pal.* V. 1902, pp. 70-80 (12 cuts), M. SOBERNHEIM publishes a series of ten Samaritan inscriptions, which form part of the wall-decoration of a private house in Damascus, and are still in part in their original frames. They are perhaps as early as the twelfth century, and indicate that the house once belonged to a wealthy member of the Samaritan congregation. Such decorations were seen by Petri della Valle in 1674. The inscriptions consist wholly of quotations from the Samaritan Pentateuch, but many of the words are abbreviated. At the end is published a small bronze amulet, bearing on both sides verses from the Pentateuch in Samaritan characters.

GAZA.—**Greek Inscriptions.**—CLERMONT-GANNEAU reports in *C. R. Acad. Insc.* 1903, p. 251, the purchase of three Greek inscriptions found at

Gaza in 1870. They are dated epitaphs, and one fixes the era of Gaza as beginning October 28, 61 B.C. They show that the calendar of Gaza was based on that of Egypt.

JERUSALEM. — **Establishment of a German Institute.** — The German Evangelical Church has founded *Das deutsche evangelische Institut für Alterthumswissenschaft des heiligen Landes* in Jerusalem. It is not proposed to undertake explorations or excavations, but rather to study on the spot the results of such explorations. At the head of the Institute is a Director, chosen for his knowledge of Biblical Antiquities, and with him is associated an Assistant, chosen for a year from among the younger theologians. Fellows are to be sent out for shorter periods. The Managing Committee has its headquarters at Berlin, and contains three members elected by the Eisenach Conference, and representatives of other bodies. The Director is chosen by the Committee with the approval of the Emperor. The first Director is Professor D. G. Dalman of Leipzig, and the Assistant Professor Löhr. The Institute is to open in the autumn of 1903. (D. H. GÜTHE, *Mith. D. Pal. V.* 1902, pp. 81-85.)

Inscriptions and Forgeries. — In *Mith. D. Pal. V.* 1903, pp. 17-32 (34 cuts), Dr. DALMAN publishes a number of inscriptions which have come to his notice in collecting a small museum for the new German Evangelical Archaeological Institute. For the most part they are short Latin or Greek inscriptions, from tiles, stamps, jar handles, and lamps. Three marble fragments, said to come from a tomb near Ascalon, bear a very suspicious Greek inscription, which cannot possibly have been an epitaph. A third fragment, said to have been found with them, bears unmistakable Jewish ornamentation, and does not seem to belong with the inscription. A sarcophagus, adorned with the bust of a man and an old Hebrew inscription, certainly owes its decorations to a modern hand. Modern also is the fragment of a granite column. These forgeries seem to be survivals of the school of Schapira and Selim. Other forgeries of inscriptions on seals or metal tablets are briefly described, and a warning given against counterfeit Jewish coins.

LEBANON. — **Ancient Sites.** — In *Records of the Past*, II, 1903, pp. 336-340 (2 cuts), Mrs. GHOSN EL HOWIE describes briefly ancient sites still marked by ruins in the neighborhood of Schweir on Mt. Lebanon. At Merjaba are rock-cut tombs carved in great limestone boulders. At Suborta are foundations of ancient buildings, column drums, and on a fountain the remains of a Greek inscription.

SIDON. — **Discovery of a Phoenician Temple.** — Letters from H. WINCKLER, according to the *National-Zeitung*, report the discovery near Saida of an old Phoenician sanctuary, the temple of Eschmun. It was situated on the slope of a hill, and must have been built on a series of terraces. Thus far the work has been chiefly at the bottom of the hill, where a large wall has been uncovered, in which were several inscribed stones. Many fragments of statuettes, stelae, columns, etc., have been found. In a well near by is a large slab bearing an Aramaic inscription in characters of unusual size. (*Berl. Phil. W.* July 18, 1903.)

TAANACH. — **Further Discoveries.** — In *Mith. D. Pal. V.* 1902, pp. 33-36, Dr. SELLIN continues his report on the excavations at Taanach (Ta'annek). See *Am. J. Arch.* VII, 1903, p. 107. At the west end of the

Tell a broad wall when fully cleared proved to belong to a Canaanite castle containing fourteen rooms and strongly fortified. On the north a platform proved to contain a tower, which was an outwork of the Israelite castle at the northeast. The most important discovery was the finding in the southern part of the Tell of an Israelitish altar of incense. The numerous fragments when pieced together showed it was of the exact size prescribed in the Mosaic law, with a ram's horn, and decorations of six cherubs and four lions, as well as reliefs representing the Tree of Life and the battle with the serpent. The excavations have laid bare an Arabian castle (c. 800 A.D.), a late Israelite (c. 500 B.C.), and an early Israelite (c. 950 B.C.) fortification, and a Canaanite (c. 1300 B.C.) stronghold, besides altars, sacrificial columns, and a mass of small objects. *Id. Ibid.* 1903, pp. 1-4, reports a supplementary campaign in March, 1903. It showed that the chief buildings were already known, but laid bare a number of private houses containing a mass of small objects, and a curious underground structure, which, however, was entirely empty. In one of the houses were found four tablets, one of stone, and three of clay, with cuneiform inscriptions. With the exception of one tablet from Lachish these are the first found in Palestine.

TELL-EL-MUTESELLIM. — **German Excavations.** — On April 1, 1903, Dr. G. Schumacher began excavations for the German Palestine Association at Tell-el-Mutesellim, which is one of the possible sites of Megiddo. The other site, Chirbet el-Leddshon, is also included in the firman and may be excavated later. (*Mith. D. Pal.* V. 1903, p. 15.)

TRIPOLI. — **A Bronze Image.** — In *R. Arch.* II, 1903, pp. 113-114 (cut), R. DUSSAUD describes a curious bronze, similar to one in Constantinople described by Perdrizet (*R. Arch.* I, 1903, pp. 397-400; see *Am. J. Arch.* VII, 1903, p. 370). The headdress indicates that this belongs after the Moslem conquest. The rays of the Constantinople figure point to a period of heathenism, probably the third or fourth century of our era. Such figures seem to have been fastened as ornaments to the body of metal vases.

ARABIA

ADEN. — **A Greek Bronze.** — In *R. Arch.* II, 1903, pp. 337-338 (cut), S. R. publishes the bronze handle of a patera or mirror lately bought at Aden by P. Bardey from an Arab, who claimed to have found it in an ancient necropolis. It bears a semi-nude female figure in relief, and seems to be very good Greek work, doubtless imported from Alexandria.

Forgery of Yemenite Inscriptions. — In *J. Asiat.* I, 1903, pp. 162-165, H. DERENBOURG publishes three Yemenite inscriptions sent from Aden and pronounces them forgeries. The same conclusion is reached as to the inscription on a cylindrical seal in the collection of A. Blanchet. Evidently antiquities from Yemen must be carefully examined.

ASIA MINOR

RECENT EXCAVATIONS. — A summary of the results of recent excavations, up to June, 1903, at Pergamum, Ephesus, and Miletus, is given by A. J. B. WACE in *J.H.S.* XXIII, 1903, pp. 335-355 (22 cuts). The work at **Pergamum** has been at the northwest gates and on the southern slope, along the great road that leads from the south gate of the wall of Eumenes II to the Acropolis, past the second agora with its shops, the city

fountain, and the three gymnasium terraces. The Astynomi and money-changers' inscriptions, the head of Alexander type, and the torso of a warrior, are the most important single finds. At **Ephesus**, the theatre with logeion, reached by steps at the centre, and inclined planes at the end, is of Roman construction, built over the theatre of Lysimachus, but parts of the latter can still be studied. The whole quarter toward the harbor, with agora, forum, gymnasium, etc., is well mapped out. A fine Hellenistic tripylon gate near the Roman harbor shows that this was also the harbor in earlier times. A building having a large colonnaded court with rows of raised seats along one side has not been identified. A round building of a mausoleum type perhaps celebrates the victory over Aristonicus about 132 B.C. Many of the finds of sculpture, both marble and bronze, have already been described. Among them are a Roman copy of a fifth-century female head, a portrait head represented as Hermes, perhaps a copy from an Antiochus II, and a relief of the Amazon of Polyclitus. At **Miletus** also the theatre is well enough preserved to show both the Roman and the earlier construction. The Bouleuterion, of the first half of the second century B.C., the Nymphaeum or city fountain building, the great south gate on the road to Branchidae, and the fortifications in which five periods can be traced, — early and late Hellenistic, the time of Trajan, the time of Gallienus, and Byzantine, — are other important points.

CYZICUS. — Sculptures. — In the *Annual of the British School at Athens*, VIII, 1903, pp. 190–196 (3 pls.), F. W. HASLUCK publishes six fragmentary sculptures recently found at Cyzicus. (1) An archaic relief of Heracles striding to the left; the pose and dress are common on black-figured Geryon vases; good work of the sixth century. (2) Part of a large composition representing two bulls overpowered by lions; probably of the end of the sixth century. (3) A marble statue of an enthroned goddess; the head and arms are gone; Hellenistic work, but apparently derived from a fifth-century model. The presence of the pomegranate on the footstool suggests that it represented Core Soteira. (4) A small funeral relief, containing the inscription published by Lolling, *Athen. Mitth.* IX, 1884, p. 22, No. 16. (5) A large Ionic volute with a rosette at the centre. (6) Fragments of two very plain and primitive Ionic volutes.

EPHESUS. — Discoveries in 1902. — At Ephesus favorable water conditions permitted the uncovering, east of the Roman Agora, of a large open square, 200 m. in diameter, surrounded by a wall and a triple colonnade, which was rebuilt in the time of Hadrian. This open space had been mistaken for a harbor. A late Hellenistic agora with a propylæum, altered in Roman times, is identified by inscriptions near the eastern "Gate of the Forum." (*Arch. Anz.* 1903, p. 77.)

ERYTHRAE. — Inscriptions. — In *R. Ét. Anc.* V, 1903, pp. 231–233, A. FOUTRIER publishes five inscriptions from Erythrae. One is a decree of the Ionian confederation voting a gold crown to Apollodotos, son of Parmeno, to be bestowed at his funeral. Another is in honor of a victor in the *dolichos* for boys, and bears the artist's signature, *Δημοκράτης Λεοντίδος ἐποίησεν*. The others are honorary or sepulchral.

HALICARNASSUS. — Rock Tombs. — In *Jh. Oesterr. Arch.* I. VI, 1903, Beiblatt, col. 101–108 (8 figs.), FR. V. VON HOLBACH describes three rock-hewn tombs at Halicarnassus. All consist of a chamber, usually

adapted from a natural cave, in the sides of which are cut the small chambers which served as graves.

ISAURIA. — A Journey of Exploration. — In the spring of 1902 the Society for the Promotion of German Science, Art, and Literature in Bohemia sent an expedition to explore ancient Isauria, including careful observation of ancient remains and roads, as well as of the modern conditions. This district was chosen because it had been but little visited by modern travellers, and was closely connected with the regions explored by the Vienna Academy. Starting from Koniah (Iconium) on April 4, the expedition first moved west to Jonuslar (Pappa Tiberiopolis), and then thoroughly examined the region to the southwest, especially the district between Lakes Caralis and Trogitis. The sites of Vasada and Amblada were determined by inscriptions. From the southern end of Lake Caralis their route lay south, in eastern Pisidia, by the valley of the Melas and the site of Cotenna. South of this place and east of Kara Odscha were discovered considerable remains of a flourishing city of Roman times. The inscriptions did not reveal its name. From Usunlar on the Carpus, the way led northeast over the Taurus by the rarely crossed pass, Susam Beli. In this region many ruins of the castles of Isaurian robber chiefs were visited. Seventeen days were spent at Isaura, where the walls, the Acropolis, buildings, and graves were carefully studied and a plan prepared. From this point the expedition returned to Koniah. Over three hundred new inscriptions were collected, eighty known inscriptions revised, and more than four hundred photographs taken. [J. JÜTHNER, F. KNOLL, K. PATSCH, H. SWOBODA, *Vorläufiger Bericht über eine Archäologische Expedition nach Kleinasien*. Mittheilung XV der Gesellschaft zur Förderung Deutscher Wissenschaft, Kunst, und Literatur in Böhmen. Prag. 1903; 2 maps; 16 cuts.]

TARSUS AND THE CILICIAN GATES. — In *Athen*. August 1, 1903, W. M. RAMSAY reports the results of further examination of the vicinity of Tarsus and of a trip through the Cilician Gates. The triumphal arch two miles northwest of Kavakli is identified with the Quadriga (Kodrigai) of the Tarsian coins. It was in a large fortified city of the Imperial period, probably the residence of the wealthy, who thus escaped the unhealthy situation of the lower city. The sites of Faustinopolis, Loulon, Assakaliba, Hirakla, and other places were determined in the journey through the Gates. The results are to be communicated to the Royal Geographical Society.

THRACE AND SCYTHIA

ALBANIA AND MACEDONIA. — Notes of Travel. — At the May (1903) meeting of the Berlin Archaeological Society, Mr. TRAEGER reported his observations made in Albania and Macedonia in the years 1899–1901. Many traces of Roman occupation, inscriptions, grave furnishings, ruined fortifications, etc., exist even in the remote mountain regions of Albania. Near **Mati**, where a grave of about 300 A.D. was opened, there is a tradition of a large city having once existed. Bronze relics and stone-lined graves are not uncommon. A peculiar type of fibula seems to be purely Illyrian. **Ochrida** and its neighborhood offer a rich harvest from Roman times. Greek inscriptions naturally predominate in Macedonia. This country, too, is a promising field for archaeologists, when they shall turn their attention to it. A five weeks' stay in **Salonika** allowed a study of the tumuli in the

Macedonian plain and around the base of Olympus. They are of two entirely distinct origins, distinct in time, race, civilization, and purpose, the round ones being for burial, the larger irregular ones, probably the remains of dwelling sites which belong to a time when the plain of Macedonia was largely under water. (*Arch. Anz.* 1903, pp. 118-119.)

CONSTANTINOPLE. — Changes in the Museum. — The Ottoman Museum at Constantinople has devoted separate rooms to Hittite and Byzantine objects and another to an architectural collection, beginning with pieces from Magnesia. The sculptures from Tralles are the most important addition of the year. (*Arch. Anz.* 1903, p. 77.)

IZGHERLI. — A Treasure Trove. — In *C. R. Acad. Insc.* 1903, pp. 399-390 (2 cuts), DEGRAND reports the recent discovery at Izgherli, near Bessa-Para in Bulgaria, of gold coins and gold and silver vessels. The coins were all apparently of the time of the Comneni, and were said to have weighed 25 kg. They were divided among the peasants who discovered them, sold to money-changers, and for the most part melted. The same fate befell a gold cross, a silver vase, and some massive silver plates. Only three of the latter were preserved because of an engraved design, which Babelon considers Persian. These objects were buried near a castle, probably at the time of the invasion of the region by the Crusaders under Frederick Barbarossa. The neighborhood deserves careful exploration. It contains several tumuli, and the peasants are rapidly destroying the remains in their search for further treasure.

ROUMANIA. — Discoveries in 1902. — In Roumania there were found several pieces of jewelry and silver vessels, with some rings that may have served as money. The decoration of the silver ware is not unlike the style of the Hildesheim and Boscoreale treasures. From **Pietroassa** come three gold buckles and a bronze group of a lion and two human figures, the bronze probably having a religious purpose and belonging to the Gothic temple from which came the well-known treasure of Pietroassa. In the **Dobrudja** were found some twenty inscribed stones and two plundered graves in an exceptionally well-built tomb. (*Arch. Anz.* 1903, p. 111.)

THESSALONICA. — A Metrical Inscription. — In *Berl. Phil. W.* September 26, 1903, P. N. PAPAGEORGIOS publishes a Greek sepulchral inscription from Thessalonica, containing three hexameters. K. DIETERICH points out that it was not composed earlier than the second century after Christ, as the distinction between long and short vowels is scarcely felt, and metrical feeling was certainly lacking in the author. There seem traces also of the correcting hand of a grammarian.

GREECE

ANDROS. — Grave Reliefs. — In *Jh. Oesterr. Arch.* I. VI, 1903, Beiblatt, col. 93-98, F. HILLER VON GAERTRINGEN and A. SCHIFF (3 cuts) publish with brief descriptions three grave reliefs from Andros. The first is of the Hegeso type with the figures reversed. It bears an inscription of about 100 B.C., though the type of the sculpture points to an earlier date. The second represents a standing youth in a short chiton and girdle. It is locally celebrated as having furnished the pattern for the costume of the Kairis School, founded in 1853. The third is a late Hellenistic relief representing a seated man and standing boy.

ARGOLIS.—**Discovery of Asine.**—At Tsafer-aga near Mycenae Kofiniotis has discovered the remains of the ancient Asine. The walls of the Acropolis are of the Mycenaean age and well preserved. Other discoveries include a tank, three divisions of the palace with finely preserved wall paintings and reliefs, a beehive tomb containing reliefs, buildings of the Mycenaean age, huge column drums, and the remains of an early but handsome temple, which the discoverer considers the temple of Ἀπόλλων Πυθαιεύς (Paus. II, 36, 4; III, 7, 4). Vase fragments were numerous and contain a great variety of decorations. The excavations are to be continued. (*Vossische Zeitung*, in *W. Klass. Phil.* December 9, 1903.)

ARGOS.—**Discovery of Tombs.**—Dr. Vollgraff's excavations at Argos have led this year to the discovery of two tombs, hitherto undisturbed, which contained painted vases, fragments of pottery, ornaments made of glass paste and of gold. These last were evidently made to be sewn upon garments. He has also discovered this year the foundations of a temple, the further excavation of which has been postponed, and the Roman agora. (*Athen*, August 22, 1903.)

ATHENS.—**Lead Tablets with Curses.**—In excavations south of the Acropolis in 1900 five lead tablets were found bearing imprecatory inscriptions. Two were so damaged as to be illegible, and on the third the letters are distributed at random. The fourth and fifth are well preserved, and the latter contains the complete formula for such inscriptions. Hermes here appears as δόλιος, κάτοχος, χθόνιος, and ἐριούνιος. The latter epithet is new in these inscriptions, but may be explained by the definition in Eustathius, ἐριούνιος . . . χθόνιος παρὰ τὴν ἔραν. (J. H. W. STRYD, Ἐφ. Ἀρχ. 1903, col. 55-59; 3 cuts.)

Property of the Hermocopidae.—In *Jh. Oesterr. Arch.* I. VI, 1903, pp. 236-241 (2 cuts), A. WILHELM publishes a new fragment of the accounts connected with the sale of property of the Hermocopidae. This fragment belonged just below the one in *C.I.A.* IV, 1, 277 d, which Köhler considered part of the inventory of Alcibiades' property. The new text also contains the names of several articles enumerated by Pollux as part of the furniture of a bed chamber. The text of both fragments is discussed and restored. The chief value of both stones is in the picture of the equipment of a wealthy Athenian's house in the fifth century.

A Votive Relief.—The National Museum at Athens has recently acquired a votive relief discovered to the south of the Acropolis. It represents the three Nymphs dancing about an altar; on the extreme left Pan, Apollo seated on a rock and resting his left arm on his cithara, and Hermes with one foot on the rock conversing with Apollo. At the extreme right six worshippers approach the Nymphs. The relief differs somewhat from the usual Attic type. It is probable that it had been carried from the caves on the Acropolis, where were worshipped Apollo, Pan, and the Nymphs. It seems to be a work of the middle of the third century B.C. (P. KASTRIOTES, Ἐφ. Ἀρχ. 1903, col. 39-42; cut.)

CRETE.—**LEUKE.**—**An Early Purple-fishery.**—Leuke, the "White Isle" (modern Kouphonisi), off the southeast coast of Crete, was an important fishing-station in antiquity. Last May the island was explored by C. T. Currelly and R. C. Bosanquet. Among sand-hills on the north shore they found a bank of shells, some whole, but mostly crushed, of the variety

Murex trunculus, which is known to have been used in the manufacture of the purple dye. Scattered through the heap were fragments of pottery and of a steatite bowl which marked it as not only pre-Hellenic but pre-Phoenician. Further digging within a few yards of the heap brought to light characteristic Cretan vases of the Kamares type and the foundations of a house. The evidence shows that the extraction of the purple-juice was practised in Crete at least as early as 1600 B.C. Hitherto, the Phoenicians have been credited with the discovery of "Tyrian purple." It appears, however, that in this matter, as in the art of writing and perhaps in other inventions attributed to the Phoenicians by Greek authors, the Minoans of Crete were the real pioneers. (R. C. BOSANQUET, British Association for the Advancement of Science, Southport, 1903.)

CRETE. — PALAEOKASTRO. — Excavations of the British School.

— The fourth Cretan campaign of the British School at Athens lasted from March to June, 1903. The headquarters of the expedition were again at Palaeokastro on the east coast. The work done may be summarized as follows:

(1) The excavation of the settlement discovered last year at Roussolakkos was continued with the help of Mr. M. N. Tod and Mr. R. M. Dawkins. It proves to be a considerable town, regularly laid out in streets and blocks. The streets are narrow, from 5 feet to 12 feet wide, well paved, with a raised footpath at one side and a deep gutter at the other. One main street has been cleared for over 150 yards. Each block has a frontage of from 120 feet to 180 feet, and contains three or more houses. The general plan of the town and parts of the houses date from the latter part of the Kamares period, but there was extensive rebuilding during the Mycenaean period. House-fronts in ashlar masonry, bath-rooms, drainage arrangements, and a great variety of domestic utensils, indicate widespread prosperity and comfort. The inhabitants had wheat and peas; they made oil and probably wine. They imported obsidian from Melos, green porphyry from the Peloponnese, and liparite from the Lipari Islands. Their wealth was probably derived from trade with Egypt. Marine designs, such as rocks, corals and seaweed, shells and cuttlefish, predominate on the Mycenaean vases found this year. (2) The ossuaries outside the town were further excavated by Mr. W. L. H. Duckworth. (3) The surrounding region was explored. A pre-Mycenaean sanctuary was discovered on the hill of Petsofà, above the town, and remains of an equally early purple-factory on the island of Kouphonisi. Caves and rock-shelters were examined in the limestone plateau of the interior, and a Mycenaean farmstead was excavated at Kouraméno. (4) The physical characteristics of the present population were studied by Mr. Duckworth, and their dialect by Mr. Dawkins. (R. C. BOSANQUET, British Association for the Advancement of Science, Southport, 1903.)

CRETE. — PETRAS. — Excavations of the British School. —

The Annual of the British School at Athens, VIII, 1903, pp. 282-285 (5 cuts), contains an account by R. C. BOSANQUET of a small trial excavation at Petras near Sitia. The ancient masonry had been largely destroyed to form cultivation terraces, but a few walls were found, and pottery of Kamares and Mycenaean styles. One cup with a spout is provided internally with five tiny rows of cells; their use is unknown.

CRETE. — PHAESTOS. — The Italian Discoveries. — In *Rend. Acc. Lincei*, 1903, pp. 317–351, R. PARIBENT gives the result of excavations in 1903 in the palace and necropolis of Hagia Triada near Phaestos. Discoveries were made as follows: Christian tombs later than the fourteenth century; foundation stones and pavement of an ancient sacred precinct, earlier than the Hellenic period, but still in use at that time, and containing many votive offerings; at a still lower level, two Mycenaean buildings, one above the other. The later one was a palace, but built also for defence. The earlier one consisted of two large, fine apartments, storerooms, and rooms for slaves. The arrangement is described in detail. The most notable discoveries occurred on the eastern and northern slopes of the hill τοῦ Ἀγίου Γεωργίου 'ς τῇ κεφάλᾳ. Here were found remains of houses, streets, and tombs. The houses and tombs were evidently those of people who worked for the master of the palace. There was also a *tholos*, the burial-place of the great family. In one tomb a stone urn was found, covered with plaster, and decorated with pictures on its four sides. *Ibid.* pp. 352–362, L. PERNIER describes the work of 1903 in the palace of Phaestos. The campaign was devoted to restorations for the preservation of the remains and to new excavations, which established certain important details in the plan of the palace; the excavation of the northwest angle of the acropolis was completed.

In *Berl. Phil. W.* October 10, 1903, G. KARO reports the Italian discoveries (see *Am. J. Arch.* VII, 1903, p. 375) on the basis of *Mon. Ant.* XIII, 1903, pp. 1–132, and adds brief mention of later finds. Two more vases of steatite have decorations in relief, showing the capture of wild bulls by armed men, and a march of warriors in full armor. The finest work is a stone sarcophagus from a shaft grave near Phaestos, decorated richly with frescoes. On each of the small sides is a goddess in a chariot drawn by griffins. One long side, badly damaged, seems to represent an offering before a domed tomb or a sanctuary; the other, well preserved, shows the double axe between two palm trees, and a huge crater into which a woman pours a libation. Another woman, richly dressed and followed by attendants, approaches with another offering.

In a ruined beehive tomb at Hagia Triada near Phaestos, Halbherr has found an Egyptian seal, apparently from a gold necklace. It bears the name of Queen Tii, wife of Amenophis III. Objects dated in this reign have been found also at Mycenae. It is curious that the fifteenth century B.C. is the time fixed by the Parian Chronicle for the arrival in Greece of Cadmus, Danaos, Cecrops, and other Eastern colonists. (V. BÉRARD, *C. R. Acad. Insc.* 1903, pp. 254–255.)

DELOS. — Recent Discoveries. — In *C. R. Acad. Insc.* 1903, pp. 347–349, appear two short letters from DÜRRBACH reporting the discovery of some Greek inscriptions at Delos. These include a large fragment (fifty lines) of the temple accounts, a decree in honor of P. Cornelius Scipio, a long Athenian inventory (ninety lines), besides many other fragments. Two fragmentary decrees are published. Most of these stones come from the filling of deep pits in the rock to the southeast of the temple, not far from the basis of *Φιλικαρτίδης*. A summary report of the work from June 15 to August 8 appears *Ibid.* pp. 422–429. The work has consisted partly of clearing away the heaps of rubbish in the sacred precinct and everywhere

reaching the virgin soil. This has led to the discovery of the pit mentioned above as well as other inscriptions. New excavations were undertaken among the houses to the south of the sanctuary. Here two streets were found, and one house cleared. It was of a somewhat different type from those previously known, and seems to have belonged to a poorer family. The excavations at the Merchants' Harbor were also continued. A large warehouse has been discovered, containing in its inner court a dozen granite columns, which originally supported a second colonnade of marble. The building is one of the best specimens of architecture in this quarter. The total number of inscriptions is ninety-two; some of great length and interest.

DELPHI. — The New Museum. — The arrangement of the new museum at Delphi is described by F. BRUNSWICK in *Berl. Phil. W.* July 11, 1903. In the basement are stored the fragments. Above, opposite the entrance, is the hall of the bronze charioteer with the best archaic terracottas and small objects. On the right are rooms for the Treasury of the Athenians, the Tholos, with a partial restoration, the Graeco-Roman art and the monument of Aemilius Paullus. On the left are the hall of Apollo, containing the painted metopes from the Treasury of Sicyon, the fragments from the temple of the Alcmaeonidae, and other sculptures; beyond this is the hall of Ionian art and the Treasury of Cnidus.

DIMINI. — An Early Settlement. — According to the *Vossische Zeitung*, Tsountas's excavations at Dimini in Thessaly have brought to light a settlement of the Stone Age. It lies on a hill and is surrounded by a series of circular walls, of which six have been so far found. Between these walls are the very small houses separated by streets about 3 feet wide. On the summit of the hill is the largest house, consisting of an inner room and a *prodomos*, in the centre of which was the circular hearth. The roof was supported by columns, of which the bases remain. Vases, utensils of stone and bone, and stone and clay idols are among the smaller objects found. Two bronze armlets and other implements belong to a later period. (*W. Klass. Phil.* November 25, 1903.)

ERETRIA. — An Early Necropolis. — In *Ἐφ. Ἀρχ.* 1903, pp. 1-38 (18 cuts), K. KOUROUNIOTES describes the excavation of a necropolis of the geometric period at Eretria in 1897-1900. The great majority of the interments were the bodies of children in large amphorae, of which some showed orientalizing decorations. The bodies of adults had all been cremated in the graves, and the vases apparently thrown broken upon the ashes. This is in marked contrast to the practice in Athens, where at this period inhumation was almost universal. The greater part of the article is occupied with a detailed study of the ceramic finds. The broken vases were partly of well-known Attic types, and from the absence of human and rarity of animal decorations seem to belong to an early period. The large amphorae, of which one bears a procession of chariots and warriors, seem to have been used as coffins, not as monuments. A number of the vases, *pyxeis*, *pitchers*, *cyathi*, as well as the amphora just mentioned, are in all probability Attic, certainly not Boeotian. A number of other amphorae show a form very like the Melian and later Eretrian vases; an ovoid body, high, cylindrical, and large neck, and a conical foot. Nine examples are described in detail and declared to be Eretrian geometric vases.

THERA. — **An Early Necropolis.** — In June, 1902, ERNST PFUHL excavated for Hiller von Gärtringen an archaic cemetery on the southwest slope of Messavuno on Thera. He publishes a very detailed report in *Athen. Mitth.* XXVIII, 1903, pp. 1-290 (45 pls., 83 cuts). After a brief historical introduction, the situation and arrangement of the cemetery are described (pp. 1-7). The single graves are then described according to their arrangement on the lower terrace, the lowest terrace, the middle terrace, the sloping terrace, the uppermost terrace, and irregularly among the blocks of rock (pp. 8-95). In all 126 graves or sacrificial trenches are fully inventoried. Unlike the necropolis excavated by Dragendorff (*Thera*, II), where the urns were usually buried singly and no general plan was observable, this cemetery consisted in great part of family graves carefully walled, and arranged in terraces between the great masses of rock. Of the contents the most important was the pottery, which is classified as Thera, Melian, Cretan, Rhodian, Samian, from other islands, Ionian of various types, Attic, including Dipylon and black-figured ware, Euboean, Protocorinthian, Corinthian, and lesser classes of unknown source (pp. 96-219). The other finds included objects of clay, stone, gold, silver, bronze, iron, lead, glass, amber, and bone, as well as shells. The gold ornaments were found in two graves (pp. 219-240). A concluding chapter (pp. 241-288) sums up the results, first for the arrangement and construction of the grave chambers, and secondly for the worship of the dead. The grave chambers are usually quadrangular, with stone walls, roofs formed by projecting stones, and doors which were walled up. There is no *dromos*. The chambers have a surface of from 1.2 to 3.5 square metres, though a few are much larger. The arrangement of the terrace walls, the paths, and a large place for the incineration of the dead point to a carefully planned design for a large group of graves. The dead were burned with libations of oil, and perhaps honey, much in the manner described by Euripides (*Iph. Taur.* 633 ff.). The bones were collected, wrapped in garments, and buried in urns, usually of clay. Little children seem to have been buried, not cremated. Many objects for the use or pleasure of the dead were buried with him; food, drink, oil, ornaments, weapons, tools, and finally representations of real objects. The sacrificial trenches show many traces of offerings to the dead, including cattle, game, fruit, and probably cakes, as well as libations. The oldest graves are perhaps of the end of the eighth century B.C., the latest of the middle of the sixth.

THERMON. — **The Metopes of the Temple of Apollo.** — In 'Εφ. 'Αρχ. 1903, col. 71-96 (5 colored plates), G. SOTERIADES continues his account of the discoveries at Thermon. (See 'Εφ. 'Αρχ. 1900, col. 161-212; *Am. J. Arch.* V, 1901, p. 101.) The present article is entirely devoted to five painted clay metopes from the temple of Apollo. Fragments of several others were found, but not sufficiently preserved to enable a reconstruction, except that one seems to have borne a sphinx. The metopes are of the native clay, covered with the pale yellow slip of the Corinthian potters. The colors employed are three shades of red, black, and white. The subjects are: (1) A Gorgoneion, with a beard. (2) A hunter, with a bow in his right hand, and on his left shoulder a rod, from which hang a wild boar and a deer. (3) Perseus fleeing from the Gorgons; he wears a sword and has on his back a bag, from which projects the upper part of Medusa's head, here

represented as human. (4) Two women facing one another, and slightly bending over some object between them, which has disappeared. Near the head of one is the retrograde inscription ΧΕ ΓΣΔ FON, and there are traces of letters near the other. This may be connected with the story of Procne. (5) Three persons seated on a throne, clothed in long garments, and possibly to be identified with Leto, Artemis, and Apollo. This is in a freer style, and is probably a renewal of a broken slab. The technique is very carefully discussed, and the close resemblance to Corinthian and divergence from Ionic art pointed out. They seem to belong to the early part of the sixth century, and, like the early inscriptions, show that the prevailing influence was Corinthian, Sicyonian, and Achaean.

VARIOUS MINOR DISCOVERIES.—At **Chaeronea** Soteriades has discovered the tomb of the Macedonians who fell in the battle in 338 B.C. (A. S. COOLEY, *Boston Evening Transcript*, October 21, 1903; see *supra*, p. 81.)—At **Kalamos** the *κοῖλον* of the theatre has been excavated, a number of coins of the Hellenic period have been found, and some buildings and a wall have been uncovered.—At **Melos** remains of walls, an ancient marble gate with an inscription of Imperial times, and a small marble head of good workmanship have been found. (Σκριπ. October 12/25, 1903.)—At **Oreos** on Euboea there has been found a treasure of more than a thousand coins, chiefly silver, including a number of unique specimens. The dates vary from the time of Alexander to the second century B.C. (*Nation*, October 15, 1903.)

ITALY

DISCOVERIES IN 1902.—Many facts for the study of pre-Roman Italy are constantly appearing. Cave-tombs in **Sicily** show an unbroken continuity of the second and third periods, and Orsi thinks he finds traces of Siculan occupation of the mainland, as Thucydides says. Many early graves have been found in Roman and Alban territory. At **Grottaferrata**, beside a neolithic grave, there are many burnt graves in which the ossuary and gifts are placed in large jars. The ossuaries are either vase-shaped with rooflike cover or hut-shaped. One of the latter has a window and contains a rough clay figure which undoubtedly represents the dead and explains the meaning of the miniature articles that appear among the furnishings. Both jars and urns approach the Villanova type and have geometric decoration. The old graves near the temple of Faustina in the **Velia** at **Rome** are somewhat later and betray foreign influence. They may have been outside of the Septimontium as well as of Roma Quadrata. Both cremation and unburnt burial appear, the latter in the later graves. To the same time belong the chamber tombs with niches at **Mazzano**, and others found north of the Lake of Bolsena, some of which have early imported vases. The square pot-stands found in **Alban** territory have both solid and pierced sides, the latter for setting over a fire. Some have the vessels in place. Similar *foculi*, but oblong, to hold two pots, occur at **Bolsena**, and with them bronze coal shovels. At **Città di Castello**, on the upper Tiber, are vessels with ornamental motives that appear also in the terre-mare. At **Bertinoro**, east coast, in a swampy mineral spring are found very primitive vessels, earlier than the Villanova type, with a hollow trunk which apparently served as a water conduit. Small ash-graves made of

stone slabs, in the **Sabine** territory, have furnishings at least as early as Villanova. At **Atria** (Hatria) are graves of a culture resembling that of the neighboring Aufidena and less closely Novilara. Here, too, are unburnt burials with the body stretched out instead of cramped. The men are buried armed and with the sword hung high on the breast. Some pre-Roman graves at **Ancona** are closely related to Villanova graves, but in many cases without cremation, the bodies being laid in little chambers built of stone slabs. Two skeletons lay on caryed beds; a third, a woman, was laid in the older fashion on a bed of gravel surrounded by rich gifts. The not unknown custom of having a lead pipe leading from the grave-stone to the mouth of the dead is exemplified in **Cesi**. Some wonderfully fine goldsmith's work almost identical with that of Vetulonia has been found at **Cumae** and raises the question which way the technique travelled and whether it is of Greek or Etruscan origin. A silver ash-urn wrapped in purple reminds one of Homeric customs. Here also is a round tomb with an arched door, for which the third century is probably too late a date. At **Aufidena** a sanctuary has been found which consists of a square court surrounded by Doric pillars resembling the earliest at Paestum and enclosing a small chapel. At **Naples**, near the new university building, part of the wall of the earliest city, of masonry similar to that of Tarentum, has come to light. At **Selinus** a breakwater in the harbor, the southern boundary of the acropolis, and an east gate have been uncovered, and near Gaggera, a Carthaginian cemetery. An artificial grotto and passage in the Rupe Atenea at **Girgenti** has not settled the disputed question of the site of Acragas. Excavations in the theatre at **Pompeii** show three different floor levels and other evidences of remodelling. At **Atria** large fish-pools have been found under the cathedral and under a palace. Sewer work in **Turin** has disclosed the course of the ancient city wall and the streets with their pavement and even the sewers, in condition to use to-day. At **Bologna**, by the bridge over the Rheno, the seventy-ninth milestone of the Augustan road from Rimini, a post 3 metres high, has been found. At **Rome**, the lowest foundation of the temple of Castor is found to be built with a skeleton of timber, like the pillars of Trajan's bridge over the Danube. The sloping ascent from the library of the temple of Augustus, the *vicus Tuscus*, and a mass of buildings at this foot of the Palatine have been or are now being excavated. Painted Greek and native vases were found at **Ferento** near Viterbo, and a number at **Gela**, including an Amazon battle signed by Polygnotus, and a complete terra-cotta sarcophagus. In **Lucania** fifth-century Greek ware is found with Apulian geometric. Noteworthy among ten or twelve pieces of sculpture are a figure of Hercules in the costume of the theatre, from the temple of Hercules Victor at **Tivoli**; a female statue with head bound in fillets, sacrificing at an altar, from a tomb at **Pozzuoli**; and a bronze Hercules from the port near **Pompeii**. (E. PETERSEN, *Arch. Anz.* 1903, pp. 85-90.)

CIVIT' ALBA. — **New Fragments of the Frieze of the Gauls.** — In *Not. Scavi*, 1903, pp. 177-185 (6 figs.), E. BRIZIO reports the discovery of terra-cotta figures belonging to the so-called frieze of the Gauls at Civit' Alba near Sassoferrato. These include two male figures, a representation of a woman, probably Latona, and a head, probably of Apollo. That Greeks as well as Gauls were represented on the frieze is indicated by the discovery of the head and shoulders of a Greek warrior.

BRINDISI. — **A Terra-cotta Weight.** — In *Melanges Perrot* (p. 264), G. PERDRIZET published a terra-cotta relief from Tarentum. A similar one was in Brindisi thirty-two years ago. It represented an owl with arms as well as wings, apparently clasping a statuette of Athena. Like the Tarentum relief this is semi-elliptical, and pierced with two holes. These are not ex-votos, but rather weights used to stretch the threads on the loom. The reliefs refer to Athena, the patron of such work. (R. ENGELMANN, *R. Arch.* II, 1903, pp. 122-123; cut.)

ESTE. — **Discovery of Tombs and Mosaics.** — In *Not. Scavi*, 1903, pp. 71-81 (6 figs.), A. ALFONSI describes twenty-four tombs, together with their contents, recently excavated at Este in the Villa Benvenuti. Some of the tombs are pre-Roman, others Roman. *Ibid.* pp. 81-84 (fig.), A. PROSDOCIMI describes three mosaic pavements recently uncovered at Este.

MONTEGIORGIO. — **Novilara Tombs.** — In *Not. Scavi*, 1903, pp. 84-91 (fig.), E. BRIZIO describes five prehistoric tombs, together with their contents, recently excavated near Montegiorgio. The tombs are of the Novilara type, and contained vases, women's ornaments, etc. The writer gives also a summarized catalogue of a private collection composed of objects found at various times in the same place.

NORBA. — **Excavations in 1902.** — Excavation was continued at Norba in the summer of 1902. The remains of a building hitherto unidentified are proved by the discovery of two inscriptions to belong to a temple of Juno Lucina. The outlines of the cella and pronaos are distinct, and architectural fragments of terra-cotta and stone have been found. The original temple was not earlier than the third century B.C., but it is evident that under the Empire there was a reconstruction and also that there was in the middle ages a Christian church on the same site. Adjoining the temple is a paved area, beneath which was found a large and varied collection of votive offerings, similar to the one under the *lapis niger* in the Roman Forum. These include numerous fragments of Etrusco-Campanian vases, female statuettes of terra-cotta or bronze, — especially one of Venus and another of Juno Lucina, — and pieces of *aes rude*. On one side of the paved area are remains of a portico, which had been replaced at a later time by another, on a somewhat higher level. (L. SAVIGNONI, R. MENGARELLI, *Not. Scavi*, 1903, pp. 229-262; plan; 25 figs.)

ROME. — **Excavations on the Site of the Ara Pacis.** — The results of the excavations in the summer of 1903 on the site of the *Ara Pacis* in the Via in Lucina and within the grounds of the Palazzo Fiano-Almagià are reported by H. STUART JONES in the *London Times*, November 19, 1903, and by R. LANCIANI in *Athen.*, October 31, 1903. The latter includes a history of the site since the fall of the Roman empire. The monument included the altar itself, with a core of tufa covered with marble, a court paved with Luna marble, and an enclosing marble wall, on the outside of which were two bands of relief, the upper representing the well-known procession, while the lower consists of branches, leaves, and flowers, with birds and small animals. Lanciani regards the frequent appearance of lizards and frogs in this portion as a reference to the architects Sauros and Batrachos. A newly discovered slab of the upper frieze seems to represent the Flamines Quirinalis and Martialis with their attendants.

The striking results of the excavations are set forth in studious detail by E. PETERSEN in *Röm. Mith.* XVIII, 1903, pp. 164-176, with constant reference to his publication of the *Ara Pacis* in the *Sonderschriften* of the Archaeological Institute of Vienna, vol. II, 1902, in connection with which his present report must be studied. Incidentally PETERSEN accords in some points with the conclusions of VON DOMASZEWSKI, *Jh. Oesterr. Arch.* I. VI, 1903 (see *Am. J. Arch.* VII, pp. 479-480), but disagrees with others. In conclusion he points out that much remains to be accomplished by future excavations.

Excavations in the Forum.—In *Cl. R.* XVII, 1903, pp. 328-329, T. ASHBY, JR. reports the recent discoveries in and near the Forum. The subterranean galleries beneath the area of the Forum have been further excavated. So far six vaulted chambers have been found, each containing, in the centre of the floor, a block of travertine with a round hole in it for the capstan by which the elevators were worked in the shafts. In one gallery a fragment of the *lapis niger* was found. This would indicate an earlier date for that pavement than has been assumed, as other objects found seem no later than the end of the first century B.C. At the end of the peristyle of the Atrium Vestae are traces of a building, which preceded the earlier atrium. At the southwest of the temple of Augustus remains have been found which may be those of the Horrea Germanicana. It is reported that the church of S. Adriano (the Curia of Diocletian) will be taken by the government, and the monks given the church of S. Antonio on the Esquiline.

In *Berl. Phil. W.*, January 9, 1904, F. BRUNSWICK writes that G. Boni has rebuilt the front and corner of the south side of the great Rostra, without improving its beauty. The basis of the Column of Phocas has been cleared on three sides. Trial digging under the travertine pavement has shown behind the bases of honorary columns a large foundation of basalt and travertine which seems to have supported the equestrian statue of Domitian.

Primitive Tombs in the Forum.—In *Not. Scavi*, 1903, pp. 123-170 (50 figs.), G. BONI describes in detail the position, character, and contents of the primitive tombs recently excavated in the Roman Forum, in the vicinity of the temple of Antoninus and Faustina. There are, in all, four of these early tombs, besides two others, which are not earlier than the fifth century B.C. They contained little besides the vases, which are in good condition and somewhat numerous. In addition to the tombs, the burned remains of primitive dwellings have come to light, and a line of tufa stones, which may have belonged to an open court. The excavations in the necropolis are also described by T. ASHBY, JR. in *Cl. R.* XVII, 1903, p. 328.

Various Minor Discoveries.—BONI has discovered at the junction of the Vicus Tuscus and Via Sacra the quadrangular foundations of the *Ianus medius*. So far as can be judged this is a work of the imperial period. (*Berl. Phil. W.*, August 29, 1903.)—Many architectural fragments and sepulchral inscriptions have been found on the site of the Palazzo Torlonia. (G. GATTI, *Not. Scavi*, 1903, pp. 120-122.)—In the operations now progressing between the Piazza Venezia and the Via dei Fornari, numerous antiquities have come to light, including architectural fragments, parts of statues, and vessels of copper and of terra-cotta.—On the Via Appia Nuova an ancient pavement has been uncovered, belonging to a road which must have con-

nected the Via Appia and the Via Latina. (G. GATTI, *Not. Scavi*, 1903, pp. 225-227.)

SPOLETO.—**Discovery of the Early Wall.**—At Spoleto a portion of the primitive wall has been uncovered, with one of its gates, and the base of a tower close to the gate. A part of the wall is in the second Pelasgic style, another part, together with the tower, in the third style. (G. SORDINI, *Not. Scavi*, 1903, pp. 186-198; 5 figs.)

VAYES.—**A Neolithic Settlement.**—In *B. Paletn. It.* 1903, pp. 125-136 (pl.), A. TARAMELLI concludes his treatment of the neolithic settlement, Rumiano di Vayes, in the Val di Susa (see *Am. J. Arch.* VII, 1903, p. 385). This article is given to a description of the vase fragments. In conclusion, the writer finds that the objects represent not tombs, but habitations, and that it was a settlement of the early neolithic period.

VARIOUS MINOR DISCOVERIES.—The Museum of Bologna has recently acquired various antiquities from the necropolis of **Belmonte**, in Picenum, including necklaces, bracelets, and fibulae of the sixth century B.C.; also a Sabellian inscription.—On the site of **Falerii** (Falerone) Roman inscriptions have been found, architectural fragments, pieces of a glass cup decorated with figures in intaglio, and an inscribed weight showing that there was an office for the verification of weights and measures on the Capitoline at Rome. (E. BRIZIO, *Not. Scavi*, 1903, pp. 101-116; 11 figs.)—Near **Marino** a prehistoric tomb has been found, consisting of a *dolium*, containing an ossuary and four other vases. (P. SECCIA, *Not. Scavi*, 1903, pp. 203-204.)—P. ORSI has excavated in the plain of **Matrensa**, near Syracuse, several tombs belonging to the transition between the first and second periods. (*B. Paletn. It.* 1903, pp. 136-149; 3 pls.; 4 figs.)—In *Not. Scavi*, 1903, pp. 116-120, A. PASQUI describes several Etruscan sarcophagi recently found in the necropolis of the ancient **Musarna**.—At **Ostia** a room has been excavated containing, sunk in the earth forming its floor, thirty-five large jars for the storage of grain. (G. GATTI, *Not. Scavi*, 1903, pp. 201-202.)—In *Not. Scavi*, 1903, pp. 217-225 (6 figs.), G. PELLEGRINI describes the archaic and Etrusco-Roman vases recently found in the necropolis of **Sovana**.—In *Not. Scavi*, 1903, pp. 205-216 (15 figs.), Q. QUAGLIATI describes in detail numerous vases found recently in various parts of **Tarentum**.

SPAIN

DISCOVERIES IN ANDALUSIA IN 1902.—Numerous mosaics and a hunting Diana, closely resembling the Diana of the Hind, were found at Itálica, near Seville, but much more interesting are some specimens of native art, found in 1900 but only recently published. In a well, up in the mountains of Estepa, were six votive reliefs and an inscription, probably of the second century A.D. The reliefs represent a nude hunting goddess, probably the Iberian Diana, an unknown goddess of silence, the heads of two female flute-players, two bearded heads, and the heads of an aged man and woman. The work is rough and entirely independent of Hellenistic-Roman influence, but it has qualities that recall the dignity and vigor of the best Greek period. (PIERRE PARIS, *Arch. Anz.* 1903, pp. 106-108.)

BORNOS.—**A Bronze Statuette.**—In *R. Ét. Anc.* 1903, p. 388 (pl.), PIERRE PARIS publishes a pretty bronze statuette of Venus found in 1897 at Bornos (Carissa Aurelia). The goddess is nude, and seems to have been

arranging her hair with her left hand, by the aid of a mirror in her right. The type is a common one, but few of these Roman copies preserve so much of the delicacy of the original.

FRANCE

DISCOVERIES IN 1902.—Besides the Athena of Poitiers, discovered in January, 1902 (see *infra*, p. 115), the finds include a headless statuette of a Venus type, now at the museum at Agen; a number of bronzes, among them two figures of Mercury and one of Mars, from the ruins of Mandeure; a piece of the ancient city-wall at Orleans, with a votive inscription to a warrior god; an oculist's seal, with Greek legend, from Boulogne; funeral inscriptions of the Gallo-Roman period; and, in the neighborhood of the great Arvernian sanctuary and temple of Mercury on the Puy-de-Dôme, a column of grayish marble, a great retaining wall, with tiled pavement and fragments of architectural mouldings, and a second smaller temple, contemporary with the larger one. There are evidences of the survival of the temple beyond the middle of the third century, when it is usually thought to have been destroyed. (E. MICHON, *Arch. Anz.* 1903, pp. 108-109.)

BERNIFAL.—**Palaeolithic Signs.**—In *C. R. Acad. Insc.* 1903, pp. 219-230 (6 cuts), Dr. CAPITAN, Abbé BREUIL, and PEYRONY describe another palaeolithic grotto with wall carvings in the neighborhood of Eyzie. In addition to representations of mammoth, horse, and bison, this cave contains a new series of triangular figures. These are interpreted as representing primitive dwellings, and the joint series of animals and huts, a sort of savage charm, whereby the animals are to be brought under the control of the owner of the hut, and virtually confined therein. An account of these drawings, translated from the *Revue de l'École d'Anthropologie*, appears in *Records of the Past*, II, 1903, pp. 361-365 (pl.).

BORDEAUX.—**Graffito on a Vase.**—In *R. Ét. Anc.* V, 1903, p. 294, C. JULLIAN publishes a *graffito* on a pot of gray clay recently found in Bordeaux. He interprets the letters MER as *Mer(curio)* or *Me(rcurio) R(egi)*, in accordance with a suggestion of HÉRON DE VILLEFOSSE in *R. Ép. M. Fr.* 1903, No. 1, that such *graffiti* contain dedications to divinities. The pot also contains rude drawings, for which no interpretation seems possible.

CHÂTELET.—**Vase with Decorations in Relief.**—At Châtelet (Haute-Vienne) the brothers Colson have found a fine red vase with decorations in relief. The subject, Orpheus playing his lyre amidst the animals, is new on the relief-pottery, but is common during the Roman period in the West, never in the East. Numerous examples are cited. (*S. R., R. Arch.* II, 1903, pp. 126-127; cut.)

DONON.—**A Prehistoric Inscription.**—In a cave at a place called La Roche de Trupt there has been found on a rock bench 2.80 m. long a primitive inscription in characters 0.70 m. high. The inscription is in two lines running the entire length of the bench, and has been scratched with a stone. The characters bear a general resemblance to the so-called Ligurian and Gallic alphabets of the south, but not hitherto known in the northeast of France. Some Greek letters and little crosses belong to later periods. (BERGER and FROELICH, *C. R. Acad. Insc.* pp. 327, 331-333.)

IZERNORE.—**Roman Baths.**—*R. Arch.* II, 1903, p. 344, contains a note from the *Nouvelliste de Lyon*, February 28, 1903, reporting the dis-

covery, in the Roman baths at Izernore, of a number of flues for heating and a hall 5 m. wide. There are indications of other similar rooms in the vicinity. Excavations were in progress at Izernore as far back as 1863.

MIGNALOUX-BEAUVOIR. — **Early Iron Swords.** — In *R. Arch.* II, 1903, pp. 56-58 (cut), H. BREUIL publishes two iron swords of the Hallstatt period, now in the Museum of Poitiers, but apparently discovered in 1836 at the neighboring village of Mignaloux-Beauvoir. One has a flat hilt, the other is provided with prongs (*épée à antennes*). Their presence in Poitou seems to indicate that the Hallstatt civilization penetrated farther to the West than has usually been believed.

MONTSA LIER. — **Recent Discoveries.** — In *R. Ét. Anc.* V, 1903, pp. 295-298 (2 pls.; cut), ARNAUD D'AGNEL reports some recent discoveries at Montsalier (Basses-Alpes). These include flint implements and a late neolithic hammer. The chief discovery is a curious relief of the Celto-Graeco-Roman period. At the left is a group of a woman seized by two warriors. On the right, a large head mounted on a sort of pedestal, bearing some rudely cut, meaningless Greek letters. Below the relief are remains of other letters. A similar head on a pedestal appears on an altar found at La Fare. Are such heads divinities, or do they represent the heads of vanquished enemies? A bronze statuette of the Gallic Mars is also published. *Ibid.* pp. 298-302 (3 cuts), C. JULLIAN maintains that these heads, like other busts found in Gaul, represent divinities, probably in most cases a Gallic Sylvanus, protector of fields and woods. The heads sculptured on trophies or on a stele at St. Germain are probably those of enemies. Even such heads, however, acquire an apotropaic value. The relief is also briefly described by CLERC, *C. R. Acad. Insc.* 1903, pp. 189-190 (cut).

PARIS. — **Acquisitions of the Louvre in 1902.** — Of the eighty numbers of new objects acquired in 1902 by the Department of Greek and Roman Antiquities, twenty-four are marbles (statues, reliefs, and inscriptions), twenty-two bronzes, five precious metals and gems, seventeen glass, twelve miscellaneous objects. There is no piece of unusual importance. A varied collection of articles brought from many places in Crete in 1893 is noticeable. Other objects are from Greece, Bulgaria, Thrace, Asia Minor, Syria, Egypt, Tunis, and Algeria. A large inscription containing parts of Hadrian's address to the army in Numidia, with dates, is from Lambaesis. (A. HÉRON DE VILLEFOSSE, E. MICHON, *Arch. Anz.* 1903, pp. 151-154.)

POITIERS. — **A Statue of Athena.** — In January, 1902, there was found in Poitiers, in the court of the High School for girls, a well-preserved statue of Athena 1.50 m. high. Only the lower right arm and some small fragments were missing. The statue is of an advanced archaic type, and as the marble seems Italian, is probably a Roman work. After a very detailed discussion of all the characteristics in *Mon. Mem. Acad. Insc.* IX, 1902, pp. 43-71 (2 pls.; 2 cuts), E. AUDOUIN reaches the conclusion that it is a copy of an original of the generation preceding Phidias, which, as it seems to reproduce a type found on Attic coins, is a work of the Attic school, and very possibly of Calamis, the favorite sculptor of that period among the Romans.

SAINT-MARTIN. — **A Terra-cotta Inkstand.** — *R. Arch.* II, 1903, p. 123 (cut), contains a note by S. R. on a small terra-cotta vase, probably an

inkstand, recently found at Saint-Martin (Mas d'Agenais) by A. Nicolai. It has a small base, on which is a larger vessel with a small hole in the top.

SAINT-SALOINE. — **Masks of Gallic Divinities.** — The museum of Saintes contains five masks of divinities in soft stone found near Saint-Saloine. All are of very rude execution and the divinities are not identified. (CH. DANGIBEAUD, *R. Ét. Anc.* V, 1903, pp. 385-386; 4 cuts.)

SIREUIL. — **Gallo-Roman Statues.** — During repairs on the church at Sireuil (Charente) in February, 1903, two mutilated statues were discovered. Heads, arms, and attributes had been intentionally broken away, but the drapery had been little injured. Around one of them was coiled a winged dragon. Both seem to be of the Roman period, and probably represent Gallic divinities. They may have come from the temple, which seems to have occupied the site of the neighboring castle of Fa, *i.e.* *fanum*. (A. FAVRAUD, *R. Arch.* II, 1903, pp. 96-99; 2 cuts.)

TEYJAT. — **Prehistoric Rock Carvings.** — In 1889 Perrier du Carne discovered, in a cave at Teyjat in Dordogne, flints and carvings on bone. A careful examination of the walls at the point where this discovery was made revealed a series of nine animals very finely carved. Among them are a bull and cow, a horse of the quaternary period, a bison, and two antelopes or goats. This makes the ninth grotto known to contain such drawings. (Dr. CAPITAN, Abbé BREUIL, and PEYRONY, *C. R. Acad. Insc.* 1903, pp. 407-412. See also *Records of the Past*, II, 1903, pp. 365-367.)

VIENNE. — **A Roman Mosaic.** — The museum at Grenoble has added to its antiquities a remarkable Roman mosaic discovered at Vienne (Isère) buried in a garden. The central medallion is illustrated with the classical story of Hylas, and the surface measurement of the whole piece, which is unfortunately not perfect, is stated to be about 4 m. 80 cm. each side. (*Athen.* August 1, 1903.)

SWITZERLAND

DISCOVERIES IN 1902. — The Antiquarian Society of Brugg, Aargau, which discovered the amphitheatre at Windisch, has found there a large large Roman building, perhaps baths, and also Roman graves on the road to Aarau. Their museum has a good collection of terra sigillata. Roman houses have been found at Baden; houses, walls, water-conduits, etc., at Mumpf. At Olten (Solothurn), the foundations of the circuit wall are found to be entirely Roman and of considerable breadth. A large Roman building at Chur was destroyed by fire and twice rebuilt, the last time in the Frankish period. (H. BLÜMNER, *Arch. Anz.* 1903, pp. 109-110.)

GERMANY

DISCOVERIES IN 1902. — A number of important neolithic burial-grounds and settlements have been examined in a systematic way in Hessen, near Worms and Heidelberg, on the right bank of the Rhine, at Heilbronn and elsewhere, and this work is greatly increasing our knowledge of the pre-Roman civilization of Germany, which seems to be continuous from neolithic times down. The region about Worms is especially productive. The late Hallstatt period is illustrated at Butzbach, in Hessen, the La Tène epoch at Manchingen, showing the extension of this culture as far east as Southern Bavaria. A bronze-age deposit from Trassem, which has been acquired by

the museum at Trier, deserves mention. An earth fortification at Ruthen, in Westphalia, belongs to the time of Roman occupation. Its external form and construction suggest Roman work of the time of the wars of Drusus and Germanicus, but the scanty evidence of pottery is in favor of a German origin. Further excavation will throw light on this interesting question. At Haltern, the gates at the east front of the large camp and a fortification down on the bank of the Lippe were explored. Three or four strong Roman forts are found to have successively occupied the same position on the river-bank, indicating that there was here an important passage to be guarded. Future investigation into the movements of the Romans in Germany must start from Haltern and Mainz as fixed points. The regular street plan of Augusta Treverorum, now pretty well ascertained, is like that of other colonies of the time, and remained unaltered during Roman times, except that the Porta Nigra and the piece of wall in which it stands are decidedly late and not in line with the rest. Remagen has now been added to the list of these later fortifications. The great amphitheatre at Metz was given up about the time of Diocletian, when the city circuit was diminished, and the material was taken to build a new amphitheatre inside the new wall. The arena buildings are, however, very well preserved. One of the earliest Christian sites is also found here. A Mithraeum has been discovered on the Saalburg and another at Wiesbaden. The circumstances of the latter find establish a date of about 300 A.D. for the "Heidenmauer," and show that the Romans still occupied certain points on the east of the Rhine after they had given up the territory as a whole. Heidelberg was another of these points. (H. DRAGENDORFF, *Arch. Anz.* 1903, pp. 111-112.)

WORK OF THE LIMESKOMMISSION FOR 1902.—The need of publication of the results already attained overshadows for the present the work of further exploration, but some important points have been touched where the gaps were most serious. Attempts to find the castle at Seligenstadt on the Main have not proved successful, nothing but a ditch that seems to belong to it having been found. At Weissenburg the excavation of the covered drill hall which spans the *via principalis* and fronts the commandant's quarters, has added greatly to our understanding of the inner plan of the castle. One more numerus-camp has been discovered, less than three-quarters of a mile from the cohort-camp at Schierhof, and with it commanding the valley of the Rems and blocking the entrance to the Röthenbach valley, in which the Rhaetian stone wall and the German palisade come together. Even this small camp has a bathhouse. Such a collocation of larger and smaller camps occurs at several other points. North of the Main, no trace of a breastwork on top of the easily scaled earth wall has been found, even with very careful search at favorable points. The top is also too narrow for a growing hedge. It is possible, therefore, to regard the wall as serving some other purpose than a defensible barrier. The course of the *limes* through a highly cultivated district of Württemberg has been traced by the charred remains and potsherds which filled the ditch. Only the absolute straightness of the line made it possible to find it at all. The whole series of guardhouses seems to have been destroyed by fire. Coins and inscriptions show that this part of the frontier was held until the time of Gallienus, 257 A.D. The corner at Haghof, where this rectilinear stretch joins at an angle very differently constructed, and earlier portions of the

line, could not be found. On the Lorch-Mönchsroth section of the Rhaetian *limes* in Württemberg, a blockhouse or wooden tower of the early type has been identified. (E. FABRICIUS, *Arch. Anz.* 1903, pp. 113-115.)

RHENISH PROVINCIAL MUSEUMS. — Recent Acquisitions. —

An account of the additions to the museums of Bonn and Trier during the year ending March 31, 1902, is given in *Jb. V. Alt. Rh.* 110, 1903, pp. 313-326; 4 cuts. Most interesting are a bronze statuette of Hercules from Dransdorf (Bonn), and some bronze weapons and gold jewelry from a hoard in Trassem (Trier).

BONN. — Report of the Provincial Museum. — The summary of the activity of the Bonn Museum (*Jb. V. Alt. Rh.* 110, 1903, pp. 122-187, 2 pl.; 21 cuts) for the period from August 1, 1901, to April 30, 1903, contains many interesting details. At **Ohrweiler** a cemetery of the time from the Flavians to Trajan has been carefully explored. At **Urmitz**, besides the excavation of prehistoric graves (see *infra*), a general archaeological survey has been conducted, with important results for the determination of the period of the prehistoric earthworks. At **Remagen** the Roman fort and defensive wall have been studied, and an inscription of 208 A.D. found, commemorating the restoration of a *horologium* (*sic*) by a praefect of the first Flavian cohort, and thus showing that this cohort was stationed in Remagen thirty-two years earlier than had previously been known. At **Bonn** the legionary camp has been further excavated, and is thoroughly described; especially the remains of a stately inscription to Claudius, dated from the year 44 A.D., thus establishing the fact that Bonn was already, at that time, the seat of an important Roman population. At **Xanten** excavations outside the Clever Thor have gone far to show that here and in Bonn are to be found the intermediate step in the architecture of gates between the Roman camp-gates and the late Roman city-gates, like those of Köln and Trier.

METZ. — Discoveries in the Roman Amphitheatre. — Some interesting discoveries in the ruins of a Roman amphitheatre at Metz include a statue of the goddess Epona, the protector of horses. Of two other monuments, one, of quadrangular form, represents two kneeling women holding fruit in their hands; the other, which is smaller, shows two Greek warriors and the goddess of war. (*Athen.* August 29, 1903.)

NYMWEGEN. — Roman Terra-cottas from the Hunenberg. — Herr G. M. Kam, of Nymwegen, has formed a collection of Roman antiquities from excavations of his own in the rich remains of the Hunenberg, an elevation close by the city. The most remarkable of the terra-cottas are listed briefly by G. MESTWERDT in *Jb. V. Alt. Rh.* 110, 1903, pp. 110-121.

REMAGEN. — Roman Graves. — The contents of a number of Roman (cremation) graves near the 'Alte Strasse' south of Remagen, and a considerable number of isolated objects found during the same excavations, are detailed by E. FUNCK, in *Jb. V. Alt. Rh.* 110, 1903, pp. 57-69 (1 pl.).

URMITZ. — Prehistoric Settlements. — A detailed account is given by A. GUENTHER, in *Jb. V. Alt. Rh.* 110, 1903, pp. 39-56 (7 cuts), of the contents of a number of graves, as well as of some isolated finds in the neighborhood of the Jägerhaus near Urmitz. The finds belong to the second period of the later Bronze age, to the transition to the Halstatt age, and to the early La Tène age.

XANTEN.—**A Roman Brick Kiln.**—A careful excavation was made in 1901 of a strikingly fine Roman brick kiln at Xanten. The results are now published in detail by PAUL STEINER and J. STEINER, in *Jb. V. Alt. Rh.* 110, 1903, pp. 70–109 (2 pl.; 7 cuts). The first part of the article contains a precise account of the excavations and of the structure of the kiln; the second, a full publication of the products of the kiln, including the bricks with stamps, of which some hundreds were found. The largest number of stamps (276, in 102 different types) was of Legio XXX; other troops represented were Legio XXII (50 stamps), Legio XV (38), Legio VI (32), and Cohors II, Britonum (10).

AUSTRIA AND HUNGARY

DISCOVERIES IN 1902.—In Austria the finds were chiefly in the Istrian and Illyrian regions; at St. Servolo, a burial ground dating from the end of the Halstatt period to the Christian era; at St. Egidio, ash urns, with small objects of the Flavian epoch; at Grado, remains of an early Christian basilica; and, most important, at Salzburg, a fragment of a bronze disk belonging to an astronomical clock, which has been known only through Vitruvius. A piece of the thigh of the Fainting Amazon at Vienna, found near Klagenfurt, settles the origin of the statue.

In Hungary the finds include, in Pannonia, an interesting hoard of Roman republican coins and barbarian coins of the first century, found near Budapest; in Moesia, a Roman barbarian burying-ground, near Szöreg. In Dacia parts of a Roman military road and some accompanying garrison camps and other settlements have been found. A place near Drág, thought to be Roman, has been found to be prehistoric. (*Arch. Anz.* 1903, p. 110.)

WORK OF THE AUSTRIAN ARCHAEOLOGICAL INSTITUTE.—In *R. Arch.* II, 1903, pp. 344–346, G. LAFAYE summarizes Bendorff's report of the work of the Austrian Archaeological Institute during the year 1902–03. Riegl has collected material for a work on the industrial art of the late empire in Austria and Hungary. Heberdey has superintended the excavations at Ephesus, and collected more than four hundred inedited inscriptions in Pisidia and Pamphylia. The attention of the Institute has been given to the monuments of the Dalmatian coast, and especially to the great palace of Diocletian at Spalato. This is described, and the efforts now in progress to preserve it from threatened destruction are reported. After the removal of some later structures and a little excavating, a complete description will be prepared by Niemann. At Salona the remains of the primitive cathedral, including a mosaic of the fourth or fifth century, have been found. Other minor discoveries are reported from Aquileia, Klagenfurt, and Salzburg. The report concludes with a list of the works in press or in preparation. Nine titles are mentioned. A brief summary is also given in *Athen.* August 22, 1903.

POLA.—**Recent Discoveries.**—Recent discoveries in Pola and its neighborhood are described briefly by A. GUIRS in *Jh. Oesterr. Arch.* I. VI, 1903, Beiblatt, col. 97–100 (4 cuts). On the shore of the bay of Fisella some Roman graves, containing little of value, and the remains of a *villa rustica* have been uncovered. The wine-cellar contained several large *dolia* with covers, and the presence of numerous whorls and weights showed that textiles were produced in some quantity. At Val Catena the harbor and

buildings on the water front were studied, and numerous small objects recovered. A systematic study of the remains at this point is to be undertaken. In Pola itself have been found some Roman graves, amphorae, a mosaic pavement, and architectural fragments. A short Latin inscription on a cippus in the museum of Stignano is also published.

SZAMOSÚJVÁR. — A Roman Fort. — In 1901 excavations were undertaken in a Roman fort near Szamosújvár. The results are described by the director, J. ORNSTEIN, in *Jh. Oesterr. Arch. I. VI*, 1903, Beiblatt, col. 109-120 (11 cuts). The excavations were chiefly along the east wall, which was easily traced for its entire length (162 m.). The gate was sufficiently well preserved to enable its plan to be fully determined. The tower at the northeast corner was also discovered. Three reliefs and a large human head with protruding tongue represent the sculptures. Six inscriptions are published, chiefly fragmentary, though one is an epitaph in four hexameters.

VELEM-ST. VEIT. — Recent Discoveries. — In *Mith. Anth. Ges. XXIII*, 1903, *Sitzb.* pp. 33-48, von MISKE and von TÖRÖK describe the results of excavations in the early settlement at Velem-St. Veit. Below the mediaeval level was found a stratum containing fragments of Roman bricks, and beneath this again La Tène and Hallstatt potsherds, and a few fibulae and bronze ornaments; there were also two hearths. Interesting was the discovery of three burials of a man, woman, and child, all of whom showed macrocephalic skulls due to artificial deformation. The situation of the bodies indicated burial in the post-Roman period. The skulls are described at great length by von Török.

VESZPRÉM. — Roman Coins. — A small hoard of Roman coins, chiefly of the period from 240-260 A.D., was found last spring near Veszprém on the Plattensee. It contained two denarii, of Septimius Severus and Elagabalus, and 140 Antoniniani, from Gordian to Saloninus. The coins are catalogued by W. KUBITSCHKE, in *Jh. Oesterr. Arch. I. VI*, 1903, Beiblatt, col. 107-110.

RUSSIA

DISCOVERIES IN SOUTHERN RUSSIA IN 1902. — Forty-three tumuli which were examined in the region of the Kuban River, north of the Caucasus, range from prehistoric to Gothic. A simply decorated round bowl of gray clay, with four feet and a small round vessel attached to the inside, perhaps for salt, is new. In graves with objects of the Subow type (*Arch. Anz.* 1901, p. 55) were found a bronze candelabrum of the sixth century and some round gold ornaments showing an animal in relief and set with blue stones, — a Babylonian type which was brought to Europe by way of Siberia in the sixth century B.C. With these objects was a new type of vase, of gray bucchero in the shape of a duck. Other graves yielded late Hellenistic bronze vases, a number of small silver vessels and glass ware of the time of Augustus, a barbarian spiral armlet of gold skilfully worked, and so-called Gothic articles of gold and stones. The succession of epochs in this region can now be traced: prehistoric, Siberio-Mesopotamian influence, Greek of the sixth and fifth centuries, then a gap to a late Hellenistic and Augustan period of about two hundred years, finally the Gothic. South of the Caucasus, in the government of Jelisawetpol, the finds were chiefly Chaldaean of the eighth century B.C. In the mediaeval capital of the Georgian kings only Roman times are represented. From Kertch come an

inlaid wooden coffin, a marble stele of the third century B.C., some important terra-cottas, and vases from many sources, including Egypt. Excavations in the government of Kiew in the Dneiper basin have brought to light a replica of the large gold quiver with punctured ornament which was found at Nikopol. This is very surprising, and shows that the metal must have been shaped by beating it into a mould. The ornament is an ignorant barbarian imitation of Greek motives. Objects of Siberian art are now found in the Volga region, and we shall soon be able to trace the course of the Massagetae, who probably brought this art into Europe. Olbiopolis (Olbia) yielded numerous objects of Roman art and both black-figured and red-figured vases; this year also for the first time, archaic vase fragments. (G. VON KIESERITZKY, *Arch. Anz.* 1903, pp. 81-85; 4 cuts.)

METAL MASKS. — *R. Arch.* II, 1903, pp. 338-339 (cut), contains a letter from A. BOBRINSKY, giving a brief description of metal face masks found in Russia. With the exception of three Mongol masks in Moscow, the specimens were found in the province of Kiew, and belong probably between the eighth and eleventh centuries of our era. The race to which these burials belong is still in dispute.

GREAT BRITAIN

DISCOVERIES IN 1902. — Excavations were continued without any striking results at Silchester and Caerwent. At Merthyr Tydvil, in South Wales, a building with hypocaustum for a bath, suggests that a garrison camp belonging to the neighboring military road may have been situated here. A more important event was the excavation of a small garrison fort at the Wall of Pius, at Castlecary. Though the Wall was of earth, this is entirely of stone and of better masonry than is usual on the Wall of Hadrian. It shows no sign of rebuilding or of long occupation. All the Roman remains in Scotland seem to be of the first half or the middle of the second century after Christ. (F. HAVERFIELD, *Arch. Anz.* 1903, p. 109.)

CAERWENT. — A Roman Inscription. — In *Athen.* September 26, 1903, F. HAVERFIELD publishes a Latin inscription recently found at Caerwent. The first two lines are almost lost. The rest reads, *leg(ato) leg(ionis) i[i] Aug(ustae), proconsul(i) provinc(iae) Narbonensis, leg(ato) Aug. pr. pr. provi(nc)iae Lugudunensis: ex decreto ordinis respublica civit(atis) Silurum.* The last clause shows that in Britain, as in Gaul, the old canton was the unit. The council of magistrates (*ordo*) of the Silures was evidently the chief ruling body in that canton. Indications of this system were known, but this inscription adds much to the definiteness of our knowledge.

OXFORD. — Acquisitions of the Ashmolean Museum in 1902. — The new possessions of the museum at Oxford include, in the **Egyptian** section, flint implements, the contents of a skeleton grave of the first dynasty, a small stele with very primitive hieroglyphics of the third dynasty, the only one known, and other objects from graves of the third and fourth dynasties, a pilgrim bottle of pure tin of the eighteenth dynasty, the oldest article of pure tin known, crocodile mummies and mummy-case portraits from the Graeco-Roman finds in the Fayum, wooden boxes containing toilet articles, a stone table, stone vases, etc. Among the **Prehistoric Greek and Italic** objects are a series of finds chiefly pottery, from the excavations at Phylakopi in Melos, illustrating the successive stages of the

native art, followed by imported Cnossian ware and local imitations of Cnossian; painted pottery from a neolithic settlement near Volo; and two short swords from Italy which show Mycenaean influence. To the **Classic Greek and Roman** belong a Parian marble head of Apollo of the Pourtalès type, an aedicula for domestic worship from the time of the early emperors, and two bronze figures from originals of the fifth or early fourth century. (A. J. EVANS, *Arch. Anz.* 1903, pp. 154-155.)

TODMORDEN.—**Discovery of a British Barrow.**—In *Reliq.* IX, 1903, pp. 276-278 (5 cuts), H. FISHWICK describes briefly and illustrates the sepulchral urns found in 1898 in a barrow at Todmorden, Lancashire. The barrow contained at least five urns, embedded in charcoal, and apparently calcined bones. The urns were of the usual coarse clay with herring-bone ornamentation. Two of the small vessels called incense-cups were also found, as well as a small bronze implement and a few jet beads.

ROUGHCASTLE.—**A Roman Fort.**—Mr. MUNGO BUCHANAN, of Falkirk, is preparing a record, with plans, of the excavations which are being conducted by the Scottish Society of Antiquaries at Roughcastle, one of the Roman forts on the line of the Wall of Antoninus, near Falkirk. The ramparts have been constructed in the same fashion as the wall; a layer of stones was used as a foundation, and then layers of turf till the desired height was reached. There are evidences that the fort was built at a later date than the wall; there was, as at Castlecary, a gateway on the north side, as well as on the east, south, and west. A series of pits, which apparently contained sharpened stakes, guarded the northern gate. (*Athen.* Sept. 26, 1903.)

AFRICA

DISCOVERIES IN 1902.—In *Arch. Anz.* 1903, pp. 90-106 (9 cuts), A. SCHULTEN gives a résumé, from various periodicals and from private communications, of the archaeological work and discoveries in Tunis and Algeria in 1902.

I. **Tunis.**—Four series of Carthaginian graves are distinguished, the third containing the earliest Carthaginian coins, the fourth being accompanied by pottery works. The Odeum or covered theatre at **Carthage** is wholly Roman in plan, and in some points resembles the theatre at Pompeii. Sculptures found here include a good male torso, a Venus, and a copy of the Hellenistic "Seneca" head, suggesting that this represents, not a philosopher, but a dramatist. The much-questioned diminutive axes, with eyes for suspension, seem to be amulets, related to the symbolic axes found in ancient Italic graves. A sarcophagus of the fourth or third century B.C., from Bordj-Djedid, has on the cover a relief of a woman, which closely resembles the Attic grave reliefs of that time. The Museum of St. Louis (Carthage) has a large collection of Roman and Byzantine weights, and a hoard of coins which were perhaps buried at the time of the Vandal invasion. A quantity of Rhodian wine-jar stamps shows the wide extent of Rhodian wine exportation. The main work of the Service des Antiquités was the excavation of **Gigthi**, with the public buildings about the Forum, honorary inscriptions valuable for the town history, a temple of Mercury with columns in the form of ship cables, indicating the source of the wealth by which it was built, many buildings with exquisitely colored plastered

walls, and, in the neighborhood, villas with mosaic floors. A remarkable three-sided mausoleum having Doric columns, reliefs of the human and brute life of the country, and Latin inscription, belongs to the third or fourth century of our era. A capital of the sixth century after Christ from Sûsa has animal ornaments very like some in Venetian churches. A buckle set with glass is probably Vandal. Exploration is extending eastward to the Limes Tripolitanus, which, with its fortifications, belonged to the Provincia Tripolitana, and it may yet reach Cyrene. An ancient aqueduct near the modern Feriana supplies the French camp with drinking-water.

II. **Algeria.** — At **Timgad**, the bath houses and the house of Faustus and Valentina have been excavated, and a mosaic of Diana and Actaeon found with an artist's signature, which is not fully understood. A building with a large apse, perhaps of the fourth century after Christ, resembles Mau's "Temple of the City Lares" at Pompeii, but its real purpose is unknown. The work at Timgad, which is not conducted by any professional archaeologist, is said to be poorly and wastefully done. In Algeria as a whole the antiquities are left too much scattered about the country, instead of being gathered into a few central and accessible museums. At **Lambaesis**, the Praetorium, or garrison camp, is cleared and can be compared with those at Novaesium (Neuss) and Carnuntum. These do not possess the large hall of sacrifice, probably roofed, which Lambaesis and other border camps have. At **Cherchel**, an imposing residence, containing a quantity of sculpture, has been found in the west part of the town, and is conjectured to be the palace of Juba II and Ptolemaeus. Coins support this view. New sculpture from Cherchel includes a statuette of a shepherd of a type which has been called a flute-playing faun. The museum at **Tebessa** possesses a number of stelae of Saturn, who, with his frequent companion Ops, seems to have been worshipped as the patron of husbandry, the chief industry of the region. A gravestone, with hollows to receive the funeral viands, follows a type of Egyptian origin. A model of an amphitheatre and a relief picture of a scene wall are probably votive offerings. The Christian remains, chiefly architectural and in low relief, recall a wood-carving technique. One imposing female figure on a sarcophagus relief has not been satisfactorily identified. A mosaic floor laid off into numbered divisions is for some game. An interesting piece of sculpture, a young faun, apparently from a group, resembles in attitude the youth from Subiaco and, to some extent, the bronze from Cerigo. A colossal head of Minerva, which has been stored in a cellar for a quarter of a century, is now exhibited and published. In the region of Constantine, near **Tobna**, are Roman waterworks still serviceable. The large Roman citadel, the city wall, and plan of streets recall those of Turin, Aosta, etc. The road connections indicate the importance of the place, which was an outpost from Lambaesis on the edge of the Desert. An artificially raised stone or menhir, of the type found in North-western Europe, is the first to be known in Africa. A Mercury on a relief has a tortoise and scorpion, besides the usual attributes. The Mausoleum of Praecilius in **Constantine**, which had important frescoes, has been destroyed without being copied. Two Punic objects, rare in Algeria, are a bronze mask and a sarcophagus cover. A stone marked *bene lava* gives a variant on the bath mottoes *bene laves, salvum lotum*, etc. There are here new examples of the half-cylinder form of gravestone which, though consid-

ered African, has been found also in Spain, Lucania, and the Moselle region. The ancient hydraulic works by which the winter rainfall was held back on the mountain sides and distributed, are constantly receiving further study, but no inscriptions have as yet proved whether they are Roman or Byzantine.

CARTHAGE.—**A Bilingual Inscription.**—In his excavations at Carthage Father Delattre has found a lead patera bearing an inscription in Greek and Phoenician. The latter is translated "That which is vowed to the gods"; the former consists of the letters $\alpha\zeta \dots \phi\eta\mu\upsilon\nu$, and cannot well be earlier than the fourth century B.C. Two Punic inscriptions have also been found; one the epitaph of the priestess Ummastoret, the other a fragment on an amphora. (PH. BERGER, *C. R. Acad. Insc.* 1903, pp. 194-198; 3 cuts.)

Terra-cotta Statuettes.—In *C. R. Acad. Insc.* 1903, pp. 429-436 (4 cuts), Father DELATTRE publishes four statuettes recently found in the cemetery of the Rabs near St. Monica. One represents a woman playing the tympanum; another a woman holding a lyre in her left hand, and with her right pouring a libation from a patera over a small altar, from which a flame rises. The third is a group of a mother holding her daughter on her left arm. The costume indicates divinities, and they are interpreted as Astaroth and Tanit, the two principal goddesses of Carthage. The fourth figure is a horseman in pointed cap and short tunic.

Urns with Punic Inscriptions.—Father Delattre has found in the necropolis near St. Monica two amphorae bearing the same Punic inscription, which, according to the reading of PH. BERGER, must be translated, "Tomb of Bodastoreth and of Arah," though the occurrence of two names on a single urn seems strange. (*C. R. Acad. Insc.* 1903, pp. 311-313; cut.)

DJEBBA.—**A Latin Inscription.**—Father Heurtebise has found at Djebba a fragmentary Latin inscription in honor of Constantine the Great, which is of value as furnishing the ancient name, Thigiba Bure. Thuburiscum Bure and Thimida Bure are names of places near Thigiba. The word Bure is probably Punic, and may well be a pre-Roman name for this district. (HÉRON DE VILLEFOSSE, *C. R. Acad. Insc.* 1903, pp. 242-244.)

ERITREA.—**Rock-cut Figures.**—At Cullité and Dinaé in Eritrea figures cut in the natural rock have been recently observed; they are in most cases rude representations of camels and mounted men. At Cullité the figures are accompanied by an inscription, probably of the seventh century, recording a victorious expedition. (C. C. ROSSINI, *Rend. Acc. Lincei*, 1903, pp. 139-150; 6 figs.)

GUIGARICHE.—**A Tomb of Mithras Worshipers.**—In *C. A. Acad. Insc.* 1903, pp. 357-363 (3 cuts), CLERMONT-GANNEAU describes two tombs containing frescoes and inscriptions discovered at Guigariche, a short distance west of Tripoli. The tombs are cut in the rock, and each contains a niche, which is decorated with paintings, and contains the grave covered by a slab. In one the paintings are much damaged. The other contains the bust of a richly dressed woman, enclosed in a medallion supported by two young girls. In the field are scattered red roses. On the side walls are allegorical figures, and below a chariot race. A Latin inscription shows the tomb belonged to Aelia Arisuth. The other tomb belonged to Aelius Magnus. In each tomb the cover of the grave was decorated with a lion or lioness galloping to the left, and an inscription [*qu*]i leo iacet, or in the tomb

of Arisuth, *quae lea iacet*. The husband and wife had therefore attained the degree of the Lion, in the Mithraic cult. It is the first clear proof of the affiliation of women in the higher degrees, and justifies the correction of *ἰαίνας* to *λαίνας* in Porphyry, *De Abst.* IV, 16.

KSIBA. — **Recent Discoveries.** — *C. R. Acad. Insc.* 1903, pp. 283-287, contains the report of Dr. CARTON on excavations at Ksiba (El Kenissia) near Sousse. A small theatre has been partially cleared, and trial pits have brought to light mosaic pavements, frescoed walls, and a large enclosure, the use of which is not yet certain. Most important is the discovery of a sacred precinct consisting apparently of an area and cellae. Here were found a large number of *ex-votos* containing usually two or three Punic lamps, unguentaria, and a covered *olla*, containing the remains of small animals which had been sacrificed. Rude images of terra-cotta and stone were also found, and many stelae, which, however, are uninscribed. The place seems to have been important in Punic times, and valuable results are expected from further excavation. *Id. Ibid.* pp. 209-210, reports the discovery at another point of a number of altars and a stele showing in the centre the cones found on similar stelae from Hadrumetum, on the left the triangular image, on the right a caduceus; the whole flanked by columns, surmounted by an inverted crescent and a disk. The district seems to contain a necropolis.

LEPTIS MAGNA. — **Latin Inscriptions.** — In *C. R. Acad. Insc.* 1903, pp. 333-346, CLERMONT GANNEAU reports on a visit to Leptis Magna in 1895, and publishes seven Latin inscriptions. One of some length, but very fragmentary, deals with the erection of a statue in honor of the governor, Flavius Victor Calpurnius. The name of the city here appears as Lepcis Magna, corresponding to the known Punic form, Lepki.

TRIPOLI. — **A French Exploring Expedition.** — *R. Arch.* II, 1903, pp. 351-353, contains a report from *Le Temps*, June 10, 1903, of a scientific expedition conducted by Méhier de Mathusieulx through the little known regions of Tripoli. At Sabratha Roman monuments were studied and a second Sabratha inland was found. The line of the Roman road from Tacape to Leptis Magna was traced and found to run parallel to the coast at a distance of about 100 km. In the southern regions, now a desert, ruins were discovered with inscriptions and reliefs of the Byzantine period, and on turning back to the east coast the remains of the Cyrenaic post, Ciniphus, were visited. The route covered about 1600 km. in a very difficult and dangerous region hitherto almost unexplored.

TUNIS. — **Progress of Exploration.** — In *C. R. Acad. Insc.* 1903, pp. 462-463, GAUCKLER summarizes the progress made in the exploration of the Roman remains in southern Tunis. The *limes Tripolitanus* has been further explored by the excavation of the camp of the seventh cohort at Tlalet, and of a neighboring fort. The central portion of the strategic road from Gabes to Tebessa, across the Chott Fedjedj, has been fixed. The most important work has been at the harbor of Gighti (Bou-Grara). Here within three years the Forum has been fully cleared, with its Capitolium, temples, basilica, and curia. In the shipping quarter are temples of Isis and Hygieia. Excavations have also uncovered a temple of Mercury, a *macellum*, public Thermae with fine mosaics, a luxurious *villa suburbana*, with mosaics and frescoes, as well as numerous fine sculptures, and a great number of inscriptions. The results rival those at Timgad.

The Bardo Museum. — *R. Arch.* II, 1903, pp. 127-130, contains an account from the *Depêche tunisienne*, May 5, 1903, of the opening of the new rooms in the Museum of the Bardo, by M. Delcasse, Minister of Foreign Affairs. The article contains a somewhat detailed account of the present improved arrangement of the Museum, which contains a large and valuable collection of inscriptions, statues, mosaics, and smaller objects belonging to the pre-Roman, Roman, Christian, and Arab periods. Gauckler is warmly praised for the valuable results accomplished in a short time and with scanty means.

R'ORMALI. — **A Jewish Inscription.** — Émile Gautier has discovered at R'ormali, in the oasis of Bouda, in the central Sahara, a Jewish inscription of the year 5089 (1329 A.D.). It is an interesting proof of the existence of Jewish communities in this region. Popular legends still tell of their destruction by a Moslem persecution in the fifteenth century. (PH. BERGER, *C. R. Acad. Insc.* 1903, pp. 235-239.)

UNITED STATES

NEW YORK. — **A Bronze Chariot from Nurcia.** — There has recently been placed on exhibition in the Metropolitan Museum a fine bronze biga, which was found near Nurcia. On the front are a standing warrior and a woman, who seems to be handing the man a helmet and oval shield, bearing a Gorgon's and a lion's head. Beneath the shield is a spotted fawn on its back. One side panel shows two warriors fighting over a fallen body. One of them carries an oval shield like that on the front and with the same decoration. The other panel shows a man in a chariot drawn by winged horses galloping over a prostrate figure with long hair and a garment reaching to the feet. Beneath the front of the chariot projects a boar's head as a socket for the pole, which ended in an eagle's beak. Of the bronze portions but little is missing, even the wheels being well preserved. The wooden portions have been restored. Fragments of ivory indicate a lining of this substance. The small size and delicate construction seem to indicate that it was an *ex-voto* or only made for burial in the tomb. (*New York Evening Post*, October 26, 1903; *Sun*, November 1, 1903; 6 cuts; *Records of the Past*, II, 1903, pp. 367-372; 6 cuts.)

The Frescoes of Boscoreale. — The Metropolitan Museum of New York has purchased seven frescoes from the villa of P. Fannius Sinistor at Boscoreale. They will shortly be conveyed to New York by Sig. C. Canessa, who will superintend their arrangement in the museum. They represent both the earlier and later styles of decoration and are said to be not inferior in beauty to any in the Museo Nazionale at Naples. Another acquisition of the New York Museum is the Giustiniani statues, the sale of which gave occasion to so much discussion in the Italian Chambers. (*Rass. d' Arte*, October, 1903, p. 157.) An account of the frescoes is also given in the *New York Evening Post*, October 26, 1903.

BYZANTINE, MEDIAEVAL, AND RENAISSANCE ART GENERAL AND MISCELLANEOUS

PALESTINE. — **New Mosaics from Madaba.** — At Madaba in Palestine, P. Manfredi has discovered three rooms with mosaic pavements, of which one is decorated with animals and human figures and bears an inscrip-

tion in mosaic recording the fact that "the shrine of the Apostles" was completed under the bishop Sergius in the year 473 (of the Bosrian Era, corresponding to A.D. 579). (*N. Bull. Arch. Crist.* 1902, p. 135.) *Ibid.* 1903, pp. 287, 288. MARUCCHI publishes a similar mosaic inscription found by Manfredi at Jaduda near Madaba.

DALMATIA.—**A Christian Comb from Salona.**—From Salona comes a fragment of a boxwood comb found in 1900, and now in the museum at Spalato. It is Christian, having on one side a figure of Christ teaching or performing a miracle, with a disciple standing before him; on the other, two figures, perhaps disciples. (BULIĆ, *N. Bull. Arch. Crist.* 1902, pp. 41-45; cut.)

RUSSIA.—**The Manuscript of Philippe le Bon at St. Petersburg.**—In *Gaz. B. A.* XXX, July and December, 1903, Salomon Reinach continues his discussion and illustration of the manuscript of the *Grandes Chroniques de St. Denys* now in the Imperial Gallery at St. Petersburg. (See *Am. J. Arch.* VII, 1903, p. 403.)

ITALY

FLORENCE.—**An Eighth-century Mosaic in S. Marco.**—The discoveries in S. Maria Antiqua at Rome have revived interest in eighth-century painting, and especially in the mosaics with which John VII, who decorated S. Maria Antiqua, adorned the chapel of "Maria Dei Genetrix," which he built in St. Peter's. These mosaics are widely scattered at present. One of them now in S. Marco, Florence, representing the Virgin crowned and richly dressed, standing with both hands raised in the "orans" attitude, is published by GERSPACH in the *R. Art Chrét.* XIV, 1903, pp. 313-316.

New Director of the Museums.—Corrado Ricci, hitherto director of the Brera, Milan, has been nominated director of the Florence museums. Sig. Ricci is well and favorably known for his reorganization of the Brera and his restorations at Ravenna. (*Chron. d. Arts*, October 17, 1903, p. 267.)

GENOA.—**Sale of a Luca della Robbia Relief.**—It is stated that the famous bas-relief of Luca della Robbia, representing the Madonna with the Infant Jesus, has disappeared within the last few weeks from the vestibule of the Genoese palace which it has long adorned, and that a copy has been substituted for the original. This priceless work has been sold to a foreigner for the sum of 20,000 lire. (*Athen.* August 8, 1903.)

MILAN.—**A New 'Nativity' by Luini.**—During repairs to the church of S. Maria della Pace at Milan traces of a fresco were found in an arcade. The fresco was uncovered, detached, and transferred to canvas by Luigi Carenaghi, and has been placed on the right wall of the nave of the church. It is a 'Nativity,' a part of the history of Joseph, with which Luini decorated the church in 1470. (PIERRE GAUTHIEZ, *Gaz. B. A.* XXX, 1903, pp. 192-194.)

New Pictures in the Brera and Poldi-Pezzoli Museums.—The Brera has recently acquired a Cosimo Tura, 'St. Francis receiving the Stigmata,' and a portrait of Girolamo Casio, the poet-patron of Boltraffio, by that artist. The Poldi-Pezzoli collection has been increased by two valuable numbers. The first is a small triptych (15 cm. high) with enamelled decoration, representing the Nativity, Crucifixion, S. Bernardino, St. Louis of Toulouse, and the Annunciation; the second acquisition is a Madonna by Andrea Solari. (CAROTTI, *L'Arte*, 1903, pp. 115-116.)

PARMA.—**An Illuminated Manuscript of the Sixteenth Century.**—L. DIMIER communicates to the *Chron. d. Arts*, November 7, 1903, p. 286, a description of a *Book of Hours*, held to belong to Henry II of France. It contains six mediocre miniatures, whose style in connection with the costumes portrayed is sufficient to date the manuscript between 1505 and 1515. The manuscript belonged to some unknown person whose arms are figured beneath the three full-page miniatures, and then probably passed into the royal possession, when the arms of Henry were added to those of the former owner.

PERUGIA.—**A Fresco by Domenico Alfani.**—In a little chapel on the hill of Prepo, near Perugia, is a fresco which O. SCALVANTI, *Rass. d' Arte*, 1903, pp. 113–117, discovers to be by Domenico Alfani. The picture is mentioned as being the work of this pupil of Perugino by Mariotti in *Lettere pittoriche*, who says that the date 1525 is painted on the fresco. The date is covered by plaster, which will shortly be removed. The picture is Raphaelesque in many ways, but hardly done after one of Raphael's designs, showing, like others of Alfani's, too much adherence to the severer lines of Perugino's school.

RAVENNA.—**The Cathedra of Maximianus.**—The scattered pieces of this valuable monument of sixth-century Christian sculpture have been gradually collecting of late years in Ravenna, and now Count Stroganoff has given up his portion, which was one of the panels of the back of the chair, to add it to the rest. The only piece known to be still lacking is that in the Museo Archeologico of Milan, and this also will soon join the others. (E. MODIGLIANI, *L' Arte*, 1903, p. 224.)

ROME.—**Discoveries of Christian Antiquities in 1903.**—In *Athen.* December 19, 1903, R. LANCIANI writes of the discoveries in 1903 concerning underground Christian Rome. The greater part of the letter describes the discovery of the crypt of Pope Damasus. (See *Am. J. Arch.* VII, 1903, p. 398, and *infra*.)

Near the third milestone of the Via Latina a small new catacomb has been discovered. It has yielded not inscriptions, but a number of frescoes of familiar subjects. Some indications seem to show that this catacomb belonged to the heretical Valentinians. Wilpert's 'Le Pitture delle Catacombe Romane' is especially praised for its successful reproduction in colors of the existing cemetery frescoes, including many which had been thought lost or seriously damaged.

The Tomb of Damasus.—By far the most important event in catacomb excavations of late is Wilpert's discovery of the crypt of SS. Marcus and Marcellianus and of the crypt of Damasus. The excavation of the crypts has been completed since the beginning of 1903, but Wilpert's report did not appear till recently. (*N. Bull. Arch. Crist.* 1903, pp. 43–58.) The crypt of SS. Marcus and Marcellianus, martyrs under Diocletian, was found in the complex of galleries north of S. Callisto, known as the cemetery of Balbina, and is thus on the left of the Via Ardeatina, going from Rome, as Wilpert always maintained against De Rossi and his followers, who searched for it and thought they had found it in the catacomb of Domitilla. The tomb of the martyrs is double, excavated in the floor of the crypt, and covered with an uninscribed slab. The crypt is given a basilica form by three niches, and had a column in each of the four corners. Two of them are still standing, as well as the base of an altar and that of the episcopal chair. The frescoes

are not unusual, save two, that on the back wall of the absidal niche and the one which decorated its vault. Of the former there still remains the lower part of two male figures, evidently the two saints, along with the smaller figure of a woman,—the donor, according to Wilpert. In the centre of the vault is a bust of Christ. To the right the fresco is gone, but on the left we find a personage who is preparing to climb toward the Christ-head by means of a ladder. Under this ladder Wilpert found traces of a serpent, showing that the scene was taken from the Vision of Perpetua. As the "Crypta Damasi" was placed by the itineraries near the crypt of SS. Marcus and Marcellianus, the gallery leading from the newly discovered crypt was excavated and was found to lead to a cubiculum already known under the name of the Crypt of the Apostles. The pavement of this was cleared and was found to contain a number of graves and traces of a small choir. One of the long blocks on which the marble fence of this choir was set up was found in another crypt near by. It had been set originally over one of the three principal graves of the crypt and fixed with plaster. Consequently, when the base was removed, the impression of the epitaph inscribed on the slab covering the grave remained in the plaster on the under side of the base, and, although the gravestone has vanished, the inscription is nearly all saved to us. It is the epitaph of Laurentia, the mother of Damasus. Two small fragments of the original stone were also found, and from these and the plaster "cast" we learn that Laurentia lived (probably) eighty-nine years, consecrated sixty years of her life to God, after separating from her husband or after his death, and died blessed with a fourth generation of progeny. According to the *Liber Pontificalis*, Damasus was buried with his sister and mother, "*in basilica sua*." The crypt, then, with its little choir and niches, is the "basilica" meant, and the grave of Damasus is doubtless the one in the pavement of the principal niche beside that of his mother. His sister Irene was buried in the *arcosolium* of the same niche. Another grave in the pavement is a "*trismum*," or triple grave, and doubtless the one meant in an inscription seen by Marini, *Locus trisomus victoris in cruxta Damasi*. Among the inscriptions found during the excavations, the most important is the epitaph of a Theodulus and his wife, on the right end of which is carved a representation of Theodulus before the tribunal of Christ. The Saviour, labelled *δεσπότης ἡμῶν*, is portrayed beardless, sitting on a high throne, the monogram above his head. With his right hand he touches the head of Theodulus, who stands before the tribunal flanked by a sheep at either side, symbols here of the Christian community in heaven. He also is designated by his name. On the left end of the stone are some traces of another group. *Ibid.* pp. 58-108 and 195-198, MARUCCI illustrates the epitaph of Laurentia and attempts to show from it and from the inscriptions which Damasus set up in the ancient episcopal "archives," afterward S. Lorenzo in Damaso, to commemorate his own labors and those of his father in that place, that Damasus's father was the bishop Leo, whose epitaph, evidently written by Damasus, was found at Agro Verano and is now in the Lateran. He also suggests that other Damasine epitaphs, dedicated to persons hitherto unknown to us, may have been written by the pope in honor of his own relatives.

The Corvisieri Collection of Seals.—The heir of the Roman collector Corvisieri has sold the latter's collection of mediaeval and Renaissance

seals to the Italian government for 30,000 lire. The collection contains 1634 seals in bronze, silver, steel, ivory, etc. A notice of the character of the collection, which is said to be of great variety and to contain a number of important examples, is given in E. MODIGLIANI, *L'Arte*, 1903, pp. 223-224.

Slave Collar from the Tiber.—MARUCCHI, in *N. Bull. Arch. Crist.* 1902, pp. 126-127, gives a copy of the inscription on a bronze slave collar said to have been recently found in the Tiber, as follows: *Tene me fugio reboca me in Graecostadio Eusebio mancipe.* The Graecostadium is located by the *Curiosum* between the Vicus Jugarius and the Basilica Julia, by the *de Regionibus* between the temples of Castor and Vesta.

The Catacombs on the Janiculum.—More galleries of the catacomb discovered in 1898 under the monastery *delle Dorotee* in Via S. Onofrio on the Janiculum were lately opened. They are described by MARUCCHI in *N. Bull. Arch. Crist.* 1902, pp. 254-258. They are of poor construction and contain almost no decoration.

The Fortifications of S. Lorenzo fuori le Mura.—A. BACCI, *N. Bull. Arch. Crist.* 1903, pp. 127-133, publishes an inscription which, supplied and expanded, reads as follows: *In nomine Domini Temporibus | Celestini III. et Innoce[n]tii III. Romanorum Pontifi[cum] Dñus Paulus abbas Sancti | Laurentii foris muros fecit | hoc castellum per Ma[theum] monachum virum venerabilem | praelatum Sancti Benedicti.* The stone containing the inscription now forms the transenna of one of the windows of the clerestory of S. Lorenzo fuori le mura. It records the repairing of that part of the defences of the city which included S. Lorenzo, and dated probably from the Carolingian period. We read that a *castellum* forming part of this outwork was erected by the abbot Paul and the prior Matthew of the Benedictine monastery attached to the church. The existence of such a fortification had been conjectured by Rohault de Fleury, but no such proof was previously known.

A New Catacomb on the Via Latina.—Baron KAUZLER writes in the *N. Bull. Arch. Crist.* 1903, pp. 173-186 (pl.), of a catacomb which he has excavated on the right of the Via Latina, about 100 m. before it crosses the Appia Nuova. He found one arcosolium decorated with frescoes representing the Good Shepherd, Daniel, Noah, the Healing of the Leper, a celestial banquet (unique in the number of persons seated at the board, who are twelve instead of seven), the three Jonah-scenes, an orans, and the Multiplication of bread. No Christian inscriptions were found, but several pagan fragments and brick-stamps. Kauzler regards the catacomb as a private Christian cemetery, but MARUCCHI, *Ibid.* 1903, pp. 283-285, arguing from the numerous two-handled vases interspersed in the decoration, the isolation of the hypogeum, and the peculiar banquet of twelve persons, suggests that the cemetery may have been that of an heretical sect.

The American Academy in Rome.—*Am. Archit.* November 7, 1903, pp. 43-46, contains a short account of this institution, a paper by AUSTIN W. LORD on the advantages which the Academy offers to architects, and a paper by ST. GAUDENS in which he urges the necessity for sculptors of academic training in an institution of this kind. *Ibid.* November 14, EDWIN H. BLASHFIELD advises decorative painters to finish their education in Rome. *Ibid.* November 28, contains a letter from THEODORE N.

ELY, of the Board of Directors, pointing out the value of the Academy as a force for improvement in American building.

SICILY.—**Christian Lamps, etc.**—In *N. Bull. Arch. Crist.* 1902, pp. 143–153 (9 figs.), ORSI publishes under the title ‘Miscellanea Cristiana Sicula’ a number of lamps, tripod lamp-holders, and ampullae from different sites in Sicily. Those illustrated are: an ampulla of the St. Menas type, the saint between a camel and a dromedary, roughly modelled on both sides; a lamp with an inscription given as follows by Orsi, $\tau\omicron\iota\sigma\epsilon \mid \chi\omicron\sigma\iota\nu \mid \kappa\omicron\iota\delta \mid \iota\tau\omicron\nu\pi\iota \mid \omega$, both from Licodia Eubea; bronze lamp with handle formed by semicircular loops uniting to form an Ionic capital surmounted by a Greek cross; bronze lamp, with handle formed by a heart enclosing a similar cross; bronze lamp, handle a heart or ivy leaf; bronze tripod lamp-holder; plain ampulla, all from Catania; bronze lamp, with handle of flaring Greek cross, from Floridia near Syracuse.

SIENA.—**An Exposition in 1904.**—The *Palio* at Siena in 1904 will be exceptionally interesting. A committee has been formed in Italy which not only proposes to hold an exhibition in Siena of painting, sculpture, goldsmith’s work, medals, prints, tapestry, and arms, covering the Middle Ages and Renaissance, but intends to revive, on the occasion of the annual *Palio* or horse-race, the mediaeval festivals connected with it. The exhibition will last from April to August.

SPAIN

MADRID.—**The Martyrdom of Thomas à Becket on a Limoges Casket.**—An interesting Limoges casket of the fifteenth century is described by Dom E. ROULIN in the *R. Art Chrét.* XIV, 1903, pp. 299–303. It is preserved in the monastery of the Escorial. The decoration, which consists of applied copper figures, represents the murder of Thomas à Becket on the face of the casket; on its roof, his entombment. The fact that Thomas wears a crown on his head is explained by P. MAYEUR, *Ibid.* pp. 411–413, who cites evidence to show that this was early the head-dress of the bishops and continued to be worn by them far into the Middle Ages.

FRANCE

PARIS.—**New Acquisitions of the Louvre.**—Two reliefs have recently been added to the Louvre collections. One is the well-known bust of Scipio, of the fifteenth century, which has been assigned without sufficient reason to Leonardo da Vinci, and again to Verrocchio. The other has remained almost unnoticed till now. It is a Madonna with the Child surrounded by angels by Agostino di Duccio. The Scipio-relief was left to the Louvre by its owner, M. Rattier; the latter was a part of the collection of Adolf Rothschild. Reproductions of them are given by JEAN GUIFREY in *L’Arte*, 1903, pp. 206–209.

SAINT-GERMAIN-EN-LAYE.—**The Christian Museum.**—In *R. Arch.* II, 1903, pp. 262–301 (31 cuts), S. REINACH publishes an account of the Museum of Christian Antiquities recently established in the old chapel of Saint-Germain. The chapel was built in the reign of St. Louis, between 1230 and 1240, but was much damaged by alterations in the sixteenth and seventeenth centuries. It has been freed from disfigurements and partially restored during the past forty years. The article contains descriptions of

the chapel and its history by Antoine (1711-15), and Claude Sauvageot (1866), and a note on the entrances by Eug. Choret. The article also describes briefly and illustrates the eight heads which decorate the keystones of the vaulting, and which are considered by the author as portraits of St. Louis and members of his family (see *infra*). In 1900 the chapel was set apart for a museum of sculptures or casts relating to the history of Christianity in Roman and Merovingian Gaul. The article concludes with a brief catalogue of the objects now exhibited, including the most important bibliographical references, and many illustrations.

Probable Portraits of St. Louis and his Family.—The seven heads carved on keystones in the vaulting of the chapel of the chateau of Saint-Germain-en-Laye, together with another carved on the southwest turret of the same chapel, are considered by SALOMON REINACH to be portraits of St. Louis, his mother or wife, his sister, and five brothers. This is then the earliest of the portraits of St. Louis, and, for that matter, the earliest example of portraiture in French sculpture. Louis's head is very realistically done, even to the crick in the neck alluded to by a contemporary writer. (*Gaz. B.-A.* XXX, 1903, pp. 177-188.)

BELGIUM

DINANT.—**The Exposition in 1903.**—At Dinant, in August and September, an exposition of the brass-founding art was held, including in its scope all objects of this kind, but devoted chiefly to the works of the "fondeurs" of Flanders, and especially of Dinant, which was, from the thirteenth century on, the centre of the brass industry. An account of these Flemish foundries and a description of some characteristic objects in the exposition is given in an illustrated article by J. J. MARQUET DE VASSELLOT, *Gaz. B.-A.* XXX, 1903, pp. 474-486.

GHENT.—**A Reproduction of the Adoration of the Lamb by the Van Eycks.**—The "fabrique" of the Cathedral Saint-Bavon at Ghent has commissioned the Berlin Photographische Gesellschaft to make a reproduction of the centre of this celebrated triptych, never satisfactorily reproduced hitherto. The reproduction will be extended to the wings, which are in the Berlin and Brussels museums and will be lent for the purpose. (*Chron. d. Arts*, July 25, 1903, p. 220.)

GERMANY

ESSLINGEN.—**Late Romanesque Portal.**—At Esslingen, the restorations of the Dionysiuskirche have brought to light the remains of an old portal belonging to the latest Romanesque period or perhaps rather to the earliest Gothic. A reconstruction of it, taken from *Die Woche*, appears in the *R. Art Chrét.* XIV, 1903, p. 359.

UNITED STATES

CAMBRIDGE.—**Opening of the Germanic Museum.**—On November 10, 1903, the new Germanic Museum at Harvard University was formally opened. Its purpose is to bring together under one roof typical specimens of the most important non-literary expressions of the Germanic peoples. Not only architecture, sculpture, and the lesser fine arts, but also tools, vessels, implements, and models of dwellings, vehicles, boats, and

tombs are to be included in its collections. At the opening, addresses were made by Professor H. C. G. von Jagemann, Baron von dem Bussche-Haddenhausen, chargé d'affaires of the German embassy, who presented the gifts of the German Emperor, President C. W. Eliot of Harvard University, who accepted the gifts, Professor Kuno Francke, Hon. Carl Schurz, President of the Germanic Museum Association, Mr. Edward Robinson, Director of the Boston Museum of Fine Arts, and Professor William James. (W. R. THAYER, *Nation*, November 19, 1903.)

ABBREVIATIONS

Abh.: Abhandlungen. *Acad.*: Academy (of London). *Allg. Zeit.*: Münchener Allgemeine Zeitung. *Am. Ant.*: American Antiquarian. *Am. Archit.*: American Architect. *Am. J. Arch.*: American Journal of Archaeology. *Ami d. Mon.*: Ami des Monuments. *Ann. Brit. S. Ath.*: Annual of the British School at Athens. *Ann. Brit. S. Rome*: Annual of the British School at Rome. *Ann. d. Ist.*: Annali dell' Istituto. *Ant. Denk.*: Antike Denkmäler. *Anz. Schw. Alt.*: Anzeiger für Schweizerische Altertumskunde. *Arch. Ael.*: Archaeologia Aeliana. *Arch.-Ep. Mitth.*: Archäol.-epigraph. Mittheil. (Vienna). *Arch. Anz.*: Archäologischer Anzeiger. *Arch. Portug.*: O Archeologo Português. *Arch. Rec.*: Architectural Record. *Arch. Hess. Ges.*: Archiv für Hessische Geschichte und Altertumskunde. *Arch. Rel.*: Archiv für Religionswissenschaft. *Arch. d. Miss.*: Archives de Missions Scientifiques et Littéraires. *Arch. Stor. d. Art.*: Archivio Storico dell' Arte. *Arch. Stor. Lomb.*: Archivio Storico Provincie Napolitane. *Arch. Stor. Pat.*: Archivio della r. società romana di storia patria. *Athen.*: Athenaeum (of London).

Beitr. Ass.: Beiträge zur Assyriologie. *Berl. Akad.*: Preussische Akademie der Wissenschaften zu Berlin. *Berl. Phil. W.*: Berliner Philologische Wochenschrift. *Berl. Stud.*: Berliner Studien. *Bibl. Éc. Chartes*: Bibliothèque de l'École des Chartes. *B. Ac. Hist.*: Boletín de la real Academia de la Historia. *B. Arch. d. M.*: Bulletin Archéol. du Ministère. *B. Arch. C. T.*: Bulletin Archéologique du Comité des Travaux hist. et scient. *B. C. H.*: Bulletin de Correspondance Hellénique. *B. Extr. Or.*: Bulletin de l'École française de l'Extrême Orient. *B. Hist. Lyon*: Bulletin historique du Diocèse de Lyon. *B. Inst. Ég.*: Bulletin de l'Institut Égyptien (Cairo). *B. M. Soc. Ant. Fr.*: Bulletin et Mémoires de la Société des Antiquaires de France. *B. Soc. Anth.*: Bulletin de la Société d'Anthropologie de Paris. *B. Soc. Yonne*: Bulletin de la Société des Sciences historiques et naturelles de l'Yonne. *B. Mon.*: Bulletin Monumental. *B. Arch. Stor. Dal.*: Bullettino di Archeologia e Storia Dalmata. *B. Com. Roma*: Bullettino d. Commissione Archeologica Comunale di Roma. *Bull. d. Ist.*: Bullettino dell' Istituto. *B. Arch. Crist.*: Bullettino di Archeologia Cristiana. *B. Paletn. It.*: Bullettino di Paletologia Italiana. *Burl. Gaz.*: Burlington Gazette. *Burl. Mag.*: Burlington Magazine. *Byz. Z.*: Byzantinische Zeitschrift.

Chron. d. Arts: Chronique des Arts. *Cl. R.*: Classical Review. *C. R. Acad. Insc.*: Comptes Rendus de l'Académie des Inscriptions et Belles-Lettres. *C. I. A.*: Corpus Inscriptionum Atticarum. *C. I. G.*: Corpus Inscriptionum Graecarum. *C. I. G. S.*: Corpus Inscriptionum Graeciae Septentrionalis. *C. I. L.*: Corpus Inscriptionum Latinarum. *C. I. S.*: Corpus Inscriptionum Semiticarum. *Δελτ. 'Αρχ.*: Δελτίον 'Αρχαιολογικόν. *D. & S. Dict. Ant.*: Dictionnaire des Antiquités grecques et romaines par Ch. Daremberg et Edm. Saglio, avec le concours de E. Pottier.

Échos d'Or.: Les Échos d'Orient (Constantinople). *'Εφ. 'Αρχ.*: 'Εφημερίς 'Αρχαιολογική. *Eph. Epig.*: Ephemeris Epigraphica.

Fundb. Schwab.: Fundberichte aus Schwaben, herausgegeben vom württembergischen anthropologischen Verein.

Gaz. B.-A.: Gazette des Beaux-Arts.

I. G. A.: Inscriptiones Graecae Antiquissimae, ed. Roehl. *I. G. Ins.*: Inscriptiones Graecarum Insularum. *I. G. Sic. It.*: Inscriptiones Graecae Siciliae et Italiae. *Intermédiaire*: Intermédiaire de chercheurs et des curieux.

Jb. Alt. Ges. L. P.: Neue Jahrbücher für das klassische Altertum, Geschichte und deutsche Litteratur und für Pädagogik. *Jb. Arch. I.*: Jahrbuch d. k. d. Archäol. Instituts. *Jb. Phil. Päd.*: Neue Jahrbücher für Philologie und Pädagogik (Fleckeisen's Jahrbücher). *Jb. Preuss. Kunsts.*: Jahrbuch d. k. Preuss. Kunstsammlungen. *Jb. V. Alt. Rh.*: Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande. *Jb. Ver. Dill.*: Jahrbuch des Vereins Dillingen. *Jh. Oesterr. Arch. I.*: Jahreshefte des oesterreichischen archäologischen Instituts. *J. Asiat.*: Journal Asiatique. *J. Am. Or. S.*: Journal of American Oriental Society. *J. Anth. Inst.*: Journal of the Anthropological Institute of Great Britain and Ireland. *J. Br. Arch. Ass.*: Journal of the British Archaeological Association. *J. Brit. Arch.*: Journal of the Royal Institute of British

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Kb. Gesamtver.: Korrespondenzblatt des Gesamtvereins der deutschen Geschichts- und Altertumsvereine. *Kb. Wd. Z. Ges. K.*: Korrespondenzblatt der Westdeutschen Zeitschrift für Geschichte und Kunst. *Kunstchron.*: Kunstchronik.

Lex. Myth.: Ausführliches Lexikon der griechischen und römischen Mythologie, herausgegeben von W. H. Roscher (Leipsic, Teubner).

Mél. Arch. Hist.: Mélanges d'Archéologie et d'Histoire (of French School in Rome). *M. Acc. Modena*: Memorie della Regia Accademia di scienze, lettere ed arti in Modena. *Athen. Mitth.*: Mittheilungen d. k. d. Archäol. Instituts, Athen. *Abth. Röm. Mitth.*: Mittheilungen d. k. d. Archäol. Instituts, Röm. *Abth. Mitth. Anth. Ges.*: Mittheilungen der anthropologischen Gesellschaft in Wien. *Mitth. C.-Comm.*: Mittheilungen der königlich-kaiserlichen Central-Commission für Erforschung und Erhaltung der Kunst- und historischen Denkmale. *Mitth. d. Pal. V.*: Mittheilungen und Nachrichten des Deutschen Palestina Vereins. *Mitth. Nassau*: Mittheilungen des Vereins für nassauische Altertumskunde und Geschichtsforschung. *Mitth. Vorderas. Ges.*: Mittheilungen der vorderasiatischen Gesellschaft. *Mon. Antichi*: Monumenti Antichi (of Accad. d. Lincei). *Mon. Mém. Acad. Insc.*: Monuments et Mémoires pub. par l'Acad. des Inscriptions, etc. *Mün. Akad.*: Königlich Bayerische Akademie der Wissenschaften, München. *Mus. Ital.*: Museo Italiano di Antichità Classiche.

N. D. Alt.: Nachrichten über deutsche Altertumsfunde. *Not. Scavi*: Notizie degli Scavi di Antichità. *Num. Chron.*: Numismatic Chronicle. *N. Arch. Ven.*: Nuovo Archivio Veneto. *N. Bull. Arch. Crist.*: Nuova Bullettino di Archeologia cristiana.

Pal. Ex. Fund.: Palestine Exploration Fund. *Πρακτικά*: *Πρακτικά τῆς ἐν Ἀθήναις ἀρχαιολογικῆς ἐταιρείας*. *Proc. Soc. Ant.*: Proceedings of the Society of Antiquaries.

Rass. d'Arte: Rassegna d'Arte. *Rec. Past*: Records of the Past. *R. Tr. Ég. Ass.*: Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes. *Reliq.*: Reliquary and Illustrated Archaeologist. *Rend. Acc. Lincei*: Rendiconti d. r. Accademia dei Lincei. *Rep. f. K.*: Repertorium für Kunstwissenschaft. *R. Assoc. Barc.*: Revista de la Asociacion artistica-arqueologica Barcelonesa. *R. Arch. Bibl. Mus.*: Revista di Archivos, Bibliotecas, y Museos. *R. Arch.*: Revue Archéologique. *R. Art Anc. Mod.*: Revue de l'Art ancien et moderne. *R. Belge Num.*: Revue Belge de Numismatique. *R. Bibl.*: Revue Biblique Internationale. *R. Crit.*: Revue Critique. *R. Art Chrét.*: Revue de l'Art Chrétien. *R. Hist. d. Rel.*: Revue de l'Histoire des Religions. *R. Or. Lat.*: Revue de l'Orient Latin. *R. Ép. M. Fr.*: Revue Épigraphique du Midi de la France. *R. Ét. Anc.*: Revue des Études Anciennes. *R. Ét. Gr.*: Revue des Études Grecques. *R. Ét. J.*: Revue des Études Juives. *R. Num.*: Revue Numismatique. *R. Sém.*: Revue Sémitique. *Rhein. Mus.*: Rheinisches Museum für Philologie, Neue Folge. *R. Abruzz.*: Rivista Abruzzese di Scienze, Lettere ed Arte. *R. Ital. Num.*: Rivista Italiana Numismatica. *R. Stor. Ant.*: Rivista di Storia Antica. *R. Stor. Calabr.*: Rivista Storica Calabrese. *R. Stor. Ital.*: Rivista Storica Italiana. *Röm. Quart.*: Römische Quartalschrift für christliche Altertumskunde und für Kirchengeschichte.

Sächs. Ges.: Sächsische Gesellschaft (Leipsic). *S.G.D.I.*: Sammlung der Griechischen Dialekt-Inschriften. *Sitzb.*: Sitzungsberichte. *S. Rom. d. Stor. Pat.*: Società Romana di Storia Patria. *Soc. Ant. Fr.*: Société des Antiquaires de France. *Soc. Ant.*: Society of Antiquaries. *S. Bibl. Arch.*: Society of Biblical Archaeology, Proceedings.

Θρακ. Ἐπ.: Θρακικὴ Ἐπετηρίς, ἐτήσιον δημοσίευμα τῆς ἐν Ἀθήναις θρακικῆς ἀδελφότητος.

Voss. Zeit.: Vossische Zeitung.

Wiener Z. Morgenl.: Wiener Zeitschrift für die Kunde des Morgenlandes. *W. klass. Phil.*: Wochenschrift für klassische Philologie.

Z. D. Pal. V.: Zeitschrift des Deutschen Palestina Vereins. *Z. Aeg. Sp. Alt.*: Zeitschrift für Aegyptische Sprache und Altertumskunde. *Z. Assyriol.*: Zeitschrift für Assyriologie. *Z. Bild. K.*: Zeitschrift für Bildende Kunst. *Z. Ethn.*: Zeitschrift für Ethnologie. *Z. Mün. Alt.*: Zeitschrift des Münchener Alterthumsvereins. *Z. Num.*: Zeitschrift für Numismatik.

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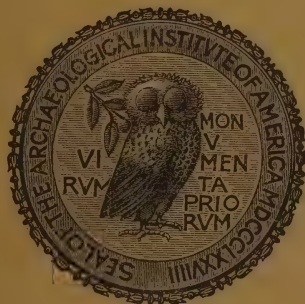
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A general meeting of the ARCHAEOLOGICAL INSTITUTE OF AMERICA will be held in Boston, in the approaching Christmas holidays, December 28, 29, 30, for the reading of scientific papers. Notice will be given in the next number of the *Journal* of the exact hours and place of the meetings. Scholars who propose to present papers at this meeting are requested to send the title of each paper and a memorandum of its length to the President of the Institute, Professor THOMAS DAY SEYMOUR, *Yale Station, New Haven, Conn.*

Because of the limitation of time by the necessities of the business meetings, of which notice is given below, a smaller number of papers than usual can be read, and the Executive Committee is entrusted with the right to make selections.

The Council of the Institute and the Managing Committees of the American Schools of Classical Studies at Athens and in Rome will meet in Boston at the time of the General Meeting of the Institute.

JUNE, 1904.

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OENIADAE

I

HISTORY AND TOPOGRAPHY

[PLATE VII]

BEFORE giving an account of the excavations undertaken at Oeniadae in 1900, notices of which have been given in *Am. J. Arch.* vol. V, 1901, p. 97, and Suppl. to vol. V, p. 26, it has seemed best to write a short history and description of the topography of the city, so that all the essential facts concerning it, being here gathered together in one place, may be kept clearly in mind.

Oeniadae in Acarnania, although a large city and an important factor in certain phases of Greek history, lacks the singer or historian to celebrate her own greatness, so that we are left with only a few scanty references in the narratives of writers, who were interested, not in Oeniadae, but in those who opposed her from time to time. From these references it is possible to form only a patchwork, the pieces of which represent strife and contention with other Greek states. Concerning the long periods between these events, we have no record to tell us of the inner life of the city. Furthermore, even in the troublous times, no one citizen of Oeniadae came to be of such prominence as to be deemed worthy of mention by the historians. Our excavations have afforded the first names of citizens of this town.

The history of Acarnania as a whole has been written by Dr. Eugen Oberhummer,¹ and may be read in his work; but here the sequence of events for Oeniadae in particular is all that I wish to consider.

The name *Oĩniáðai*, in its real signification, is a folk-name, but we find the form continually used as the name of the city;² the Doric genitive, *Oĩniadân*,³ of this form is found on the coins of the city in company with a representation of the bull-headed god, Acheloüs, who seems to have been the patron deity of the city. The name *Oĩniás* was applied to the region or district governed by the city.⁴ From this selection of names, Curtius sees⁵ traces of Ionian influence, because the Ionians were the introducers of the vine; he therefore concludes that the Acheloüs region was the seat of the ancient vine culture in Greece.⁶ The discussion of Ionians or Curetes as settlers of this district would lead us too far afield — the first recorded myths relating to the spot are Dorian.

Alcmaeon, the son of Amphiaraus, the Argive, being pursued by the Furies because he had murdered his mother, fled from Argos and came to Psophis in Arcadia. Here he married Alpheisiboea, the daughter of King Phegeus, but, finding no rest from his remorse, he consulted the oracle at Delphi. The priestess told him that he would be free only in that place which was wholly new, and which the sea had lately brought to light

¹ Oberhummer, *Akarnanien . . . im Altertum* (Munich, 1887). Cf. R. Weil, 'Oeniadae,' in *Beiträge . . . A. Wilmanns gewidmet* (Leipsic, 1903).

² Cf. Livy, XXXVIII, 11, 9: "Oeniadae cum urbe agrisque." The variant spelling *Oĩniáðai* is used by Hippocr. *Epid.* v. 3; *Schol.* Soph. *Trach.* 510; Steph. Byz. *s.v.*, and Suidas, *s.v.*

³ The genitive form *Oĩniadân* is found also in Soph. *Trach.* 510, and the scholiast on the passage says, ἀπ' *Oĩniadân*: ἀπὸ Αἰτωλίας ἣ οὕτως *Oĩniái* πόλις Ἀκαρνανίας δι' ἧς περὶ ὁ Ἀχελῷος πλεθυντικῶς δὲ λέγεται. This is the only authority for the simple form *Oĩniái* for the city.

⁴ Cf. *Schol.* Thucyd. II, 102; Steph. Byz. *s.v.*; Suidas, *s.v.* *Oĩniáðης καὶ Oĩniáðai*, ὄνομα ἔθνους. . . . *Oĩniás* πόλις.

⁵ Cf. Curtius, *Ion.* p. 29.

⁶ The wines of Oeniadae, together with those of Leucadia and Ambracia, were noted in later times, and were recommended to one of the Ptolemies by Apollodorus, a doctor. Cf. Pliny, *Nat. Hist.* XIV, 76.

after the murder of his mother. Alcmaeon found such a place near the river Acheloüs, probably at the site of Oeniadae, since this situation best suits the tale. He made his dwelling there, taking as his wife, Callirrhoe, the daughter of Acheloüs. By her he had two sons, Acarnan and Amphoterus; the former of these became the eponymous hero of the country,¹ and Pausanias says that those who were formerly called Curetes were now called Acarnanians. Pausanias (II, 2, 3) also tells us that at Corinth the nymph Pirene was considered to be a daughter of Acheloüs. These myths, connecting Corinth and the Acheloüs region, probably signify close trade relations by the convenient sea-route between these places and consequent early enmity to Athens, which we see exemplified throughout the earlier historical period.

Oeniadae² was one of the first cities to develop in this region, and when, in the fifth century B.C., we first meet it in history, we find it a strongly fortified, walled town. Pausanias (IV, 25) gives us this first peep at Oeniadae, when he tells the history of the Messenians. The Messenians, exiled from their own country, had been established at Naupactus by the Athenians. In 456 or 455 B.C. they made an expedition against Oeniadae with apparently no other motive than to show their courage. The inhabitants of Oeniadae were driven within their walls and the Messenians made such a vigorous assault against them by undermining the foundations, by using scaling ladders, and by means of other engines of war, that the citizens were glad to capitulate and to march out under a truce, so as to avoid being made prisoners of war. The Messenians held the town peaceably for a year, but the Acarnanians then collected a large force from all their cities with the intention of making an expedition against Naupactus. In the end, however, they preferred to confine their attentions to

¹ Cf. Paus. VIII, 24, 4; Thucyd. II, 102, 4.

² The Homeric Nericus, ἀκτὴ ἡπείροιο, known also in classical times, has been located by Dr. Dörpfeld at Hagios Georgios, on a promontory opposite to, and somewhat south of, the Hellenic city of Leucas. Remains of polygonal walling and ten towers survive; cf. *J.H.S.* 1901, vol. XXI, p. 342.

the Messenians at Oeniadae. These Messenians sustained a siege of eight months with great bravery; at the end of that time their provisions failed them, and one evening they cut their way out through the Acarnanian army and escaped to Naupactus. Pausanias (V, 26, 1) thinks that, in commemoration of this campaign, the Messenians set up at Olympia the statue of Victory made by Paonius of Mende, but later writers have discredited his view.

It was only a short time after these events, probably in the latter part of the year 454 B.C., that the Athenians under Pericles set out from Pegae, a Megarian town on the Corinthian Gulf, with fifty triremes¹ and one thousand hoplites. Pericles first subdued Sicyon in the Peloponnese and then sailed to Acarnania, where he laid waste the country and besieged Oeniadae, but finally departed without taking the city.² All the other cities of Acarnania Pericles had brought over to his side (*προσηγάγετο*, Diodor. XI, 85). Either at this time, or a few years later, the Athenians seem to have established a settlement in Acarnania, which they named from their own city;³ this was probably held but a short time and was soon given up.

At the beginning of the Peloponnesian War, all the Acarnanian cities took sides with Athens, excepting only Oeniadae and Astacus. Since the time of Pericles, Oeniadae had been isolated from the other cities of the region, and still retained its sympathy for Corinth and Sparta. In the summer of 429 B.C. the Ambracians and Chaones, together with some other semi-barbarous tribes, planned an incursion into Acarnania and persuaded the Spartans to send them aid. The Spartans sent

¹ Plutarch (*Pericles*, 19) says one hundred triremes.

² Cf. Thucyd. I, 111, 2; Plut. *Per.* 19; Diodorus, XI, 85, and XI, 88, 1. Diodorus, in the passages cited, merely gives two accounts of the same events, but assigns them to different years. Cf. also Aristid. I, 585, ed. Dind.: *Οἶδα δὲ εἰς Οἰνιάδας Ἀκαρνανῶν διαβάοντας, ὡς οὐκ ἦν εἰλεῖν, ἀναχωρήσαντας Περικλέους στρατηγούντος.*

³ Steph. Byz. s.v. Ἀθήναι . . . ἐβδόμη Ἀκαρνανίας, ὡς Δημήτριος, Ἀθηναίους ἐν τῇ Κουρήτιδι κτίσαντας πόλιν Ἀθήνας προσαγορεύσαι. (Cf. Oberhummer, p. 89.)

their admiral, Cnemus, with a fleet, and he, without waiting for an additional fleet which was expected from Corinth, resolved his command into a land force and joined the Ambracians, Chaones, and the allied tribes. This army, on their march southward from the Ambracian Gulf, took the town of Limnaea, and finally arrived before Stratus, then the largest city of Acarnania. The army was drawn up in three divisions to attack this town, the barbarian tribes being stationed in the centre. These last made a rash attempt against the city before the signal for a concerted attack was given, and in consequence were defeated by the people of Stratus. Cnemus immediately retreated with his force and made his way out of the country by way of Oeniadae,¹ whose citizens assisted him.

In November of this same year, the Athenian fleet under Phormio, who, while using Naupactus as a base, had destroyed the Peloponnesian fleet which Cnemus expected from Corinth and Sicyon, sailed around to Astacus, and from this point an expedition was sent into Acarnania, which accomplished little. It was deemed inexpedient to make any demonstration against Oeniadae, because winter was at hand and the marshes would soon be impassable; the fleet, therefore, sailed away to Naupactus and immediately afterward to Athens.²

In the following summer (428 B.C.), Asopius, the son of Phormio, led an expedition against Oeniadae, but met with no success,³ and from this time onward no direct attack was made against the city, although Demosthenes, the Athenian general, later made incursions into Acarnania.⁴

In the summer of 424 B.C. Oeniadae voluntarily joined Demosthenes and was received by him into the Athenian league along with the other Acarnanian cities,⁵ and we hear no more of it in the course of the Peloponnesian War.

The great physician, Hippocrates, seems to have practised at Oeniadae, probably near the end of the fifth century, for he

¹ Cf. Thucyd. II, 80-82; Diodor. XII, 47, 4.

² Cf. Thucyd. II, 102-103.

⁴ Cf. *ibid.* III, 94, 1; III, 114, 2.

³ Cf. *ibid.* III, 7, 4.

⁵ Cf. *ibid.* IV, 77, 2.

mentions six cases of diseases which he treated there;¹ none of these, however, are cases of malarial fever, as one would be inclined to infer with Oberhummer, but indigestion, inflammation of the lungs, and ulcers on different parts of the body are included.

During the Corinthian War in 394 B.C., Oeniadae was used as an observation station by the Athenians, from which they might sally forth to cut off the traffic through the gulf of Corinth.² In the large inscription, *C.I.A.* II, 17, dating from 378–377 B.C. and telling of the formation of the new Athenian confederacy, Oeniadae is probably included among the Acarnanians as a whole in the list of allies, since all Acarnania was now under Athenian control.

After Greece had come under the sway of Macedonia, Oeniadae again appears as a combatant with a combination of all Aetolia against her.³ This happened in 330 B.C., when Alexander was absent from Greece in Asia, and he was so angry that he threatened personal vengeance on the Aetolians for their harshness toward the citizens of Oeniadae. The inhabitants came back to their city again in 324 B.C., when all banished peoples were permitted to return to their homes.

In 314 B.C., when Cassander made a *κοινήν ἐκκλησίαν* for this region, most of the Acarnanians went to Stratus, but the people of Oeniadae with some others settled at Sauria,⁴ a town which has been identified with the present village of Palaeo-Manina situated on the west bank of the Acheloüs some distance above Oeniadae.

In the following year the Aetolians, together with Aeacides of Epirus, ravaged Acarnania, and Cassander sent his brother Philip against them.⁵ Philip administered two defeats to Aeacides, the second being close by Oeniadae. The city did

¹ Cf. Hippocr. *l.c.* Cf. Oberhummer, p. 118, n. 1.

² Cf. Xen. *Hell.* IV, 6, 14.

³ Cf. Diodor. XVIII, 8, 6; Plut. *Alex.* 49.

⁴ Cf. Diodor. XIX, 67, 4: Οἰνιάδαι δὲ καὶ τινες ἄλλοι συνήλθον ἐπὶ Σαυρίαν, Δερριεῖς δὲ μεθ' ἐτέρων εἰς Ἀγρίνιον.

⁵ Cf. *ibid.* XIX, 74, 3–6; Paus. I, 11, 4.

not remain long at rest, for soon after the death of Pyrrhus, in 272 B.C., it became Aetolian again; this was at the time of Alexander II.¹

A long period of quiet followed, until, in 220 B.C., when Philip V of Macedon was only seventeen years of age, the Aetolians under Dorimachus of Trichonium rose in arms. A conference was held at Corinth, and all the other allied states declared for war against the Aetolians, the Acarnanians being especially eager. Philip, in 219 B.C., came out of Macedonia and marched through Thessaly to Epirus, where he took the fort of Ambracus. He then continued his march along the northern shore of the Ambracian Gulf to Charadra (now Salaora), where he was met by a force of Acarnanians, consisting of two thousand foot and two hundred horse. With these and his own army Philip went against Phoetia (now Porta, in central Acarnania), which city marked the north-western boundary of Aetolian power in Acarnania. In two days he took the town, proceeded to Stratus on the Achelöüs (now Sourovigli), and then continued southward on the west bank of the Achelöüs to Metropolis² (now Rigani), which town he burned. From Metropolis Philip crossed the river to Canope, and again proceeded southward to Paeanium; this town he took by storm, and all the materials used in its walls and buildings were transported by way of the river to Oeniadae. The Aetolians in Oeniadae became frightened on the near approach of Philip and evacuated the citadel. Philip held the town while he made some incursions into Aetolia across the river, and even undertook some improvements in its fortifications, which are to be discussed later. He was finally obliged to discontinue his work, and to hasten back to

¹ Cf. Polybius, II, 45, 1; IX, 34, 7; Justin, XXXVIII, 1, 1.

² It seems that the territories of Metropolis and Oeniadae on the western side of the Achelöüs were contiguous, for a bronze stelé has been found at Thermus, bearing an inscription which settles the boundaries of these two cities. Cf. *Πρακτικά*, 1898, p. 107. This inscription is placed in the first half of the third century B.C., and, of course, Oeniadae then held Sauria (Palaeo-Manina), which was not far from Metropolis.

Macedonia to repel an invasion by the Dardani.¹ Phoetia and Oeniadae were thus brought back into the new Acarnanian league, and so were lost to the Aetolians.²

In 211 B.C., the Romans came as allies to the Aetolians; the praetor, Laevinius, went to Zacynthus, Oeniadae, and Nasus, and gave the last two back to the Aetolians.³ Six years later, in 205 B.C., the Aetolians made peace with Philip at Phoenice in Epirus, but Oeniadae and Stratus remained in their hands.⁴ In 196 B.C., at the Isthmian games, came the proclamation of the freedom of the Greek states, but not until 189 B.C. did Oeniadae become Acarnanian again. The Romans also gave Leucas and Anaetorium to the Acarnanians, and said that the Echinades Islands, at the mouth of the Acheloüs, were to be cultivated in common by the Acarnanians and the Aetolians.⁵ Not long after (167 B.C.), all Acarnania came under the sway of the Roman republic, and thenceforth the historical identity of Oeniadae is lost. Such, then, are the detached fragments of history, from which we gain only a faint idea of the continuous history of the city. When or why the site was abandoned we do not know.

The site of the ancient city is definitely fixed by Thucydides (II, 102), who says that the Acheloüs empties into the sea just beyond the town, and surrounds the city itself with water. Strabo (X, 2, 21, p. 459) mentions Oeniadae and the Acheloüs, and says: "There is a marshy lake at Oeniadae, which is called Melite; this has a length of 30 stadia [*i.e.* 5.55 km.] and a breadth of 20 [*i.e.* 3.70 km.]. Another, called Cynia, is double the size of this, both in length and breadth, but a third, Ouria, is much smaller than either. Cynia gives out into the sea, but the others lie about half a stadium inland." Melite is

¹ Cf. Polybius, IV, 65.

² Cf. Livy, XXVI, 24, 6.

³ Cf. *ibid.* XXVI, 24, 14; Polybius, IX, 39, 2; Justin, XXIX, 4, 7. Nasus was probably an outer fortification of Oeniadae, and may be identified with a small island in the swamp, Lezini, which now has a chapel of the Panagia.

⁴ Cf. Livy, XXIX, 12.

⁵ Cf. Dionys. Hal. *Ant. Rom.* I, 51; Polybius, XXI, 32, 14; Livy, XXXVIII, 11, 9.

the modern swamp of Lezini surrounding the site of Oeniadaë, while Cynia and Ouria seem to be best identified with the lagoons near Mesolonghi. Scylax, the geographer, in his itinerary (§ 34), mentions the city of Astacus on the coast, then a harbor, the river Acheloüs, and the city of Oeniadae, to which one sailed up by way of the Acheloüs.

In the face of such evidence as this, it seems impossible for one to go far wrong in identifying the site of Oeniadae in modern times; yet Cyriacus of Ancona, who travelled through this region in 1436, calls the village of Manina, which lies some distance up the Acheloüs, by the name of Cassiope, an ancient city of Epirus, near the sea between Pandosia and Nicopolis. (The ruins are now at the village of Kamarina, and are described by Leake.) He then proceeds to Trigardo (Oeniadae), which he describes accurately under the name of Azylea, a city which has been identified with the ruins at Kandila, near the coast of Acarnania, opposite the island of Kalamos.¹ Even Dodwell,² who should have known better, being at a loss for a name for the fine ruins at Kyr' Irene on a mountain side far over to the east of the Acheloüs in Aetolia (now identified as New Pleuron), tries to show that they marked the site of Oeniadae, although the evidence from the ancient writers is entirely contradictory.³ Colonel W. M. Leake, of course, made the correct identification of Oeniadae with Trigardo, or Tri kardocastro, a low, flat-topped hill, rising island-like from the marshes about five kilometres west from the village of Katoché (ἡ Κατοχή) and one and a half kilometres from the Aspropotamós (Acheloüs), which bends toward the west at

¹ Cyriacus of Ancona, § 40: "Ad vii. Idus Febr. (1436) vidimus in Epiro prope Acheloi fl. ostia Civitatem magnam, & vetustissimam Azyleam, quam incolae Trigardon vocant, moenibus undique lapidibus magnis, atque mirabili architectura munitam. habet duas arces turritas in angulis, & in medio civitatis theatrum xxx. gradibus altitudinis, portum ad meridiem in conspectu Itaci Insulae, & antra in Urbe duo profundis, & altissimis ex integro saxo rupis munita, & elaborata manu mira artif." Cf. Weil, *l.c.* p. 352.

² Dodwell, *Classical and Epigraphical Tour through Greece* (1819), vol. I, pp. 99-100.

³ Cf. Polybius, IV, 65.

Katoché. Katoché, lying on the west bank of the Aspro, has the remains of a Venetian castle, and at one time was a large and prosperous town, the head of the district; under the Turkish domination and in later times it has considerably deteriorated both in size and in general appearance. The site of Oeniadae was abandoned, apparently at an early period, for the site at Katoché, since the hill of Trikardo shows no evidences of mediaeval occupation, except in one instance, which will be noted later.

The name Trikardo, which was given to the site in the Middle Ages, probably has reference to the three highest elevations, which rise from the main body of the hill, viz. the fortified acropolis toward the south, the high hill near the eastern side, and the hill enclosed within the loop of the wall which extends farthest northward.¹

The walls of the ancient city, which are built along the brow of this flat-topped hill and follow the conformation of the ground in its various turnings and ascents or descents, are still well preserved; they are polygonal in style of masonry, the large blocks being beautifully fitted to one another. The wall of circumvallation has a width of 2.50 m., the space between the two facing courses of masonry being filled with small stones. At intervals of two and a half metres the wall is bound laterally with cross-walls, so that the long wall is really made up of a series of small blocks. This arrangement is well seen at the extreme northern corner of the enclosure. The lack of straight lines and the many reëntrant angles, formed by the vagaries in the course of the walls (about 6.50 km. in length), obviated the necessity of using towers in the ancient circuit, and where these are found, they are of regular Hellenic masonry and probably of later date. At a height of about four metres in the main wall a horizontal course finished the polygonal work, and probably crenellated battlements surmounted this.²

The peculiar and remarkable feature in the construction of

¹ The map (PLATE VII) is based on that contained in Heuzey's *L'Acarnanie*, but contains several additions and corrections, notably in the northern part.

² Cf. Heuzey, *L'Acarnanie*, p. 440.

the walls is the number of gateways contained in their length; these gateways embrace a variety of forms, ranging from the squared opening to the true-arched door and vaulted passageway. They merit a detailed description, and I shall here treat them in order, beginning at the north of the enclosure on the western side of the small harbor. This harbor lies in an indentation extending for some distance into the interior of the



FIGURE 1.—GATE 1 AT OENIADAE.

hill; the city wall comes to an end at the steep bank on the western side of the entrance to this harbor, and does not extend around it.¹ Heuzey indicates the principal gates by letters, but not consecutively; I have merely numbered them in rotation from the point indicated.

Gate 1 (Heuzey, *Porte A*), Fig. 1.—This gate is placed near an angle in the wall. The doorway is 2.08 m. in height and

¹ The details of this spot may best be seen on the plan of the Small Temple hereafter described (p. 203, Fig. 20).

extends through four courses of masonry. The opening is 1.16 m. in width at the bottom, but only 0.70 m. at the top. The inward slant of the two sides extends through the two upper courses; the deviation from the perpendicular is considerably greater in the upper course than in the lower. Of the covering over the passageway only one stone remains in place;

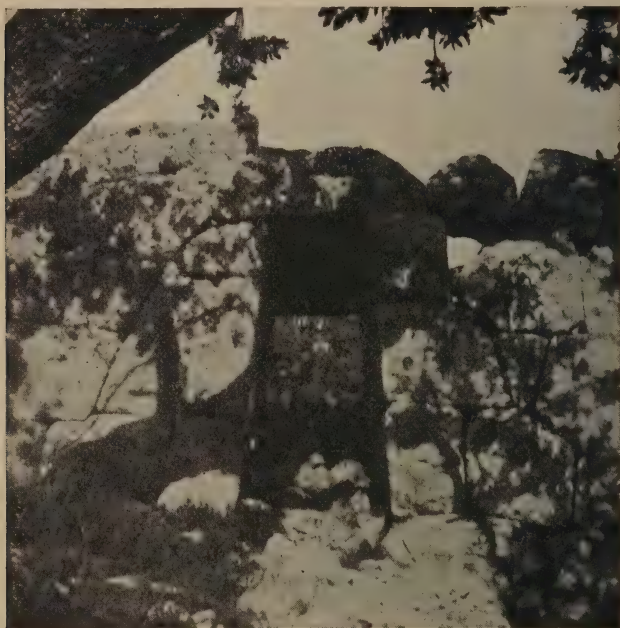


FIGURE 2.—GATE 2 AT OENIADAE.

this is a rectangular block with a flat under surface, which laps over on the wall 0.25 m. at each end.

The small gate, indicated on Heuzey's plan at a point in the extreme northern line of wall, does not now appear as such. Heuzey probably mistook a gap in the ruined wall, through which a modern path passes, for an ancient opening.

Gate 2 (Heuzey, *Porte B*), Fig. 2.—This gate is at the northwestern side of the enclosure. It is 0.95 m. in width at the bottom, 0.65 m. in width at the top, and at present has a

height of about 2.30 m. Three blocks of masonry appear at the left of the opening in the outer face and four at the right; the inward slant is only slight in the lowest course, but becomes a little more pronounced in each successive course above, so that the form of the opening is somewhat different from that of Gate 1. The passageway is perfectly preserved, and is cov-



FIGURE 3.—GATE 3 AT OENIADAE.

ered by four flat cap-stones, laid side by side; these are 0.55 m. in thickness, 1.50 m. in length, and their breadths from outside to inside are 0.50 m. + 0.80 m. + 0.50 m. + 0.60 m.

Gate 3 (Heuzey, Porte C), Fig. 3. — This gate is only a short distance to the south of Gate 2. It has a width of 1.26 m. at the bottom¹ and a height of *c.* 2.80 m. Three courses of masonry appear at each side, and these form a vertical line; from them springs a true arch, which forms a continuous vault

¹ Heuzey gives the width roughly as 1.60 m. Cf. *L'Acarmanie*, p. 443.

covering the passage. This vault is made up of five courses; it is destroyed at its outer end, and one of the four keystones lies on the ground in front of the opening. South of the passageway, and more especially on the inside, the city wall is in a ruined condition, and the lack of any backing has allowed the first course of the masonry which forms the arch to spread outwards a few centimetres. This naturally allowed the keystone to settle somewhat, so that to-day we get the peculiar effect of a pendant keystone, a phenomenon that was not originally intended. Heuzey recognizes that this effect is accidental, but curiously enough he does not seem to perceive its cause, for he complains that the arch is lop-sided and that the curve lacks the desired symmetry. That Heuzey overlooked the slipping outward of the lower course of the arch as the cause of this asymmetry, is shown in the drawing accompanying his remarks. In this drawing the side line of the gateway is represented as unbroken throughout; aside from this one defect, the sketch shows the gate as it now exists with the clinging ivy covering the gray blocks of stone with a thatch of leafy green.

Gate 4 (Heuzey, *Porte D*), Fig. 4. — From Gate 3 we cross a low hill and descend to a marshy spot on the level of the plain, where traces of the wall disappear and afterward follow the wall where it ascends a long slope on the western side of the enclosure. At the top of this slope the wall is interrupted by a steep, projecting bluff; the fourth gateway is found about 100 m. below this bluff. The opening is 1.30 m. in width at the bottom and 1.18 m. at the top, the regular slope of the sides being scarcely perceptible. The doorway at present has a height of 1.78 m. The passageway is covered by three flat blocks; the block forming the lintel is cut up slightly at a distance of 0.50 m. from the outside, but its total width is 0.80 m.; the other two blocks are respectively 0.78 m. and 1.06 m. in width. Corresponding to the upward cutting of the lintel, we find the side walls also cut back, thus making the passageway slightly wider and higher than the outer opening.

The cuttings probably formed a stone framework for a wooden door secured in position by crossbars. At each side, just back of the cuttings, is a rectangular hole about one metre from the ceiling; that to the right measures 0.12 m. $\times$ 0.14 m. and extends far into the wall, while that on the left side measures 0.12 m. $\times$ 0.11 m., but is only 0.10 m. in depth. The bar across the passage, used for fastening the door, could thus be



FIGURE 4.—GATE 4 AT OENIADAE.

pushed back into the wall out of sight when it was not in use. In the ceiling, just inside the doorway, is a circular hole, 0.11 m. in diameter and 0.07 m. in depth; this is to the left of the centre.¹ One other hole is found in the left wall of the passage, some distance from the entrance; this is much larger

¹ Similar arrangements are found in gate at Palaeo-Manina, opening into the main enclosure from the small court near the Acheloüs. The covering of the passage ascends in steps, a phenomenon which is without a parallel at Oeniadae.

than any of the others, and measures 0.42 m. in length, 0.24 m. in height, and 0.11 m. in depth. Excavation would be necessary to determine the character of the floors of these passages, which are all more or less encumbered with rubbish.

Gate 5 (Heuzey, *Porte G*), Fig. 5. — This gate is close to the southwestern curve or angle of the city wall. Its sides have a decided, but regular slope, the opening measuring



FIGURE 5. — GATE 5 AT OENIADAE.

1.12 m. in width at the bottom and 0.83 m. at the top. The present height of the gateway is 1.78 m.; the passage is 2.15 m. in length and is covered by three flat blocks. Heuzey's sketch of this gateway is incorrect; there is no small stone close under the lintel at the right, and the lintel laps much further into the wall at each end than he represents it; moreover, the lintel does not have the decidedly wedge-shaped appearance that he gives it. It is 0.42 m. thick at the left end and 0.38 m. at the right.

Gate 6 (Heuzey, Porte E), Fig. 6. — This gate is around the corner from Gate 5, at no great distance from it. It is 1.18 m. in width at the bottom, 1.05 m. in width where the sharp inward slope begins at a distance of 0.85 m. from the top, and at the top only 0.45 m. The passageway is perfectly preserved, and is covered by five flat cap-stones; at the outside end the passage is 2.50 m. in height. Heuzey again errs in his sketch



FIGURE 6.—GATE 6 AT OENIADAE.

of this gate, for the sharp inward slope begins midway of the second block from the top on the left side and forms a distinct angle in the stone. Heuzey makes the slope begin at the bottom of this stone.

Gate 7 (Heuzey, Porte F), Fig. 7. — From Gate 6 we descend along the southern line of wall into a deep hollow, and after following the wall for some distance up the opposite slope we come to Gate 7. This gateway represents the second true arch

that we have met and differs only in size from Gate 3 ; the width at the bottom is 1.15 m., and the height of the opening is *c.* 2.30 m. The stones in the arch are 1 m. in length, but only one band of them is preserved. Of the wall one large block rests in a precarious position on top of the arch, and the wall is also in a ruined condition at each side, so that unless meas-



FIGURE 7.—GATE 7 AT OENIADAE.

ures are taken to preserve it this gateway will probably be destroyed in a few years.

Gate 8 (Heuzey marks this merely *Petite Porte*), Fig. 8. — Continuing up the slope from Gate 7, we next come to a small gateway, near an angle in the wall, where Heuzey supposes a tower to have been built. The passage is nearly filled with earth, so that the approximate height of the opening cannot be determined. At the top the width is 1.12 m., the sides evidently sloped slightly. At the outer end the passageway is

ruined; but at the inner end two massive blocks are in position over the opening, with a small opening between them. Beyond these blocks, near the outer end of the passage, the sides were dressed with an inset in the same way that we noticed in Gate 4.

Beyond Gate 8 the wall makes its southernmost loop, and at the southern angle are seen the foundations of a large tower,¹



FIGURE 8.—GATE 8 AT OENIADAE.

constructed of regular masonry; the sides of this tower are about 13 m. in length. From this tower there extends toward the northeast both the main wall of the city and also the remains of a second wall, which diverges from the main wall and returns to it again about 100 m. further on, thus enclosing a small space outside the main wall. This second wall is in a ruined condition, and the stones used in its construction are unfinished and are much smaller than the blocks of masonry

¹ Cf. Heuzey, *L'Acarnanie*, p. 441.

used in the main wall. The stones are not fitted to one another, but seem to have been simply piled one upon the other. Another wall of similar construction, beginning at this large tower, extends down the slope toward the south for some distance, but traces of it are soon lost. The dating of these walls will be discussed later.

On his plan Heuzey indicates a small gateway through the main wall into the enclosure made by the wall of small stones first mentioned, but an examination now reveals no traces of such; the main wall is hopelessly ruined at this point, and the large blocks of masonry lie about in wild confusion.

The highest part of the enclosure is now near at hand; this acropolis is separated from the rest of the city by a second wall inside the main wall. The space enclosed is not great in extent, and could never have contained more than a small force. The hilltop is not entirely surrounded by walls, for on the outer side toward the plain they were not needed, excepting one small section toward the north, since on this side the rock falls away precipitously. On the side toward the city, however, we find a massive wall of beautiful polygonal construction, stoutly buttressed at its projecting angles by five mighty towers of regular Hellenic masonry, knit into the polygonal construction of the main wall and apparently a later addition to the structure.¹ The enclosure is entered through a narrow doorway between two towers; the wall is fallen here, and only one finished side of the gate can be seen. A few paces inside the gate we come upon a large cistern, hewn out of the rock. On ascending to the farthest projection of the enclosure, we find the only mediaeval remains on the whole site — these are small walls, evidently dating from Turkish times, for they are constructed of small stones deeply imbedded in mortar. The walls could have served only as foundation walls for a building, and it is interesting to discover that the acropolis is called τὸ παλάτι by the natives of the district.

¹ Cf. Heuzey, *L'Acarmanie*, p. 441.

Gate 9 (Heuzey, Grande Porte). — On descending from the acropolis toward the northeast, we find in the hollow at the foot of the hill the ruins of the largest of all the gates of the city. The whole top of this gateway has fallen, so that we have no means of judging its form, and consequently no photograph is given. The passage is 3.73 m. in width, and the wall is here strengthened so as to give it a length of 5.70 m. In the right wall of the passage is a large rectangular hole, 1.15 m. from the ground; this is 0.75 m. in height, 0.45 m. in width, and 0.22 m. in depth. This gateway was probably the main entrance to the city from the east and from the plain toward the Acheloüs; it could easily accommodate wagons, and evidences of a broad roadway, with a lower retaining wall, are seen at intervals on the slope outside the wall of the city. This roadway turned in a curve down the slope to the east and so reached the plain below, where the modern road to Katoché begins. No towers were necessary as an additional protection to this great gateway, for on its eastern side the city wall turns at a right angle, and so ran for some distance parallel to the roadway and close by the side of it.

The wall of the city continues from this point along the crest of the hill on its eastern side, and is not interrupted by gateways for a long distance, until it begins its steep descent at the northeastern part of the enclosure.

Gate 10 (Heuzey, Gate H), Fig. 9. — This gate comes at the foot of a steep bluff just inside the city wall. The opening is 1.41 m. in width at the bottom and 1.17 m. at the top. The entrance is crowned by a false arch¹ formed by two large

¹ Examples of these false arches are numerous in Acarnania, and it will not be out of place to cite a few of them here. The largest specimen that I have seen is the so-called *Avloporta* or water gate, opening out toward the Acheloüs from the lower fortifications at Palaeo-Manina (Fig. 10). This gate has a width of 2.51 m. and a height of about 4.50 m.; the sides of the gate slope inward slightly. The stones of the arch are 1.28 m. in thickness. They do not actually meet in the centre, but are covered by a cap-stone, which is still in place. Heuzey gives an illustration of this gateway and shows two great blocks crossing the passageway. One of these has fallen since his time (1856), but the other at the inner end of the passage is still in place; it is a mammoth beam of gray limestone, 0.67 m. in

blocks of stone cut upward in a curve and meeting over the centre of the opening. The arch appears only at the front; the passage is covered by two flat blocks. The sides continue to incline inward back of the arch, so that the passage measures only 0.98 m. in width at the top. The total height of the passageway is about 2.52 m.



FIGURE 9.—GATE 10 AT OENIADAE.

A short distance down the slope north of Gate 10, Heuzey indicates a small gateway. The wall is ruined at this point,

width, 0.95 m. in thickness, and 3.35 m. in length. These details will not be considered out of place here, inasmuch as the gateway is liable to further dissolution at any time.

Further up the Acheloüs, at Sourovigli (the ancient Stratus), near the south-eastern corner of the enclosure, is another gate of this same style with the passage arched throughout, and still farther northward at Karavassaras on the Ambracian Gulf, in the long wall descending from the acropolis to the seashore, are other examples (Fig. 11); these are arched only at the entrance. Karavassaras probably marks the site of the ancient Heracleia, as Oberhummer states

and a modern path passes through a gap in it, so that it is extremely doubtful if there was ever a gateway constructed here. The wall of the city now continues down the slope and ends in the marsh near a spring of fresh water.

At some point in this slope, Heuzey represents a branch wall extending from the main wall of the enclosure across to the



FIGURE 10. — AVLOPORTA AT PALAEO-MANINA.

large tower at the corner of the fortifications of the port. These fortifications lie between the two extremities of the city wall, which we have now followed throughout its entire circuit.

(p. 38); the identification with the ancient Limnaea does not suit the notices in ancient writers. Heuzey (p. 353) tells of another of these arched gates at Komboti in central Acarnania, and Leake (*Northern Greece*, III, p. 524) mentions one at Kamarina in Epirus. A similar type is found at Assos in Asia Minor (cf. *Am. J. Arch.* vol. I, 1897, pl. v). How the type originated it is difficult to imagine; possibly the original gate was cut in this style to afford additional head room for persons passing in and out, and the style was perpetuated. More probably they were copied from the true arches.

No such wall as Heuzey indicates really exists; in indicating it the wish was father to the thought, for it seems natural to expect some such connection. But no trace can be found of the wall branching from the main wall, and the corner tower is complete in itself and shows no traces of being joined to any exterior wall. True, there are some blocks forming a line for



FIGURE 11.—GATE AT KARAVASSARAS.

some eighty metres from the tower, but these are not parts of a fortification wall, and, after these come to an end, there is a long gap with no traces of masonry. When we next meet with foundations, they extend at a different angle from the preceding line, and the end toward the tower is a square, finished piece of masonry, showing that there could have been no connection with a preceding wall. This wall probably served as a retaining wall for the terrace at this point. Beyond this point no other parts of a wall appear before one reaches the main

wall of the city. If, by any chance, such a continuous wall as Heuzey indicates ever existed at this point, there would be but little excuse for the large tower in the fortifications of the port, for it would then be inside the wall of the city. From all the evidence of the remains, it appears that the fortifications of the port were separate and complete in themselves, and the small enclosure, which they formed, lay midway between the extended lines of the main wall of the city, like a pebble in the claw of a crab. The walls of the city, extending from the acropolis, were thus in the style of exaggerated *σκέλη*, or "Schenkel-mauern" (to use the German expression), such as may be seen in the ruins at Karavassaras on the Ambracian Gulf; the small gaps between these walls and those of the port were amply protected; that on the west was occupied by the harbor, and that on the east was closed by the impassable marsh.

We may now examine the fortifications at the port, independently of the Ship-Sheds at the southwest corner, which are treated separately by Mr. J. M. Sears, Jr. The accompanying sketch (Fig. 12) gives all the measurements and affords one a better idea of the enclosure than could be gained from a verbal description. The walls are polygonal in style, the same as those of the main circuit, but the two towers, namely the larger one at the southeastern corner and the smaller one farther to the north near the gateway into the enclosure, are of squared Hellenic masonry. It is interesting to note that each of the four straight lines of polygonally constructed wall is broken at some point in its length, so as to form a slight projection; this seems to have obviated the use of towers in the original plan.

By far the most interesting feature of these fortifications is the large arched gateway in the eastern line of wall (Fig. 13). The width of the passage is 3.44 m., and its height about 2.85 m. The passageway (2.97 m. in length) extends obliquely through the wall, inclining toward the north. At a distance of 0.70 m. back, on the northern side of the passage, is a projection parallel with the face of the wall; this is

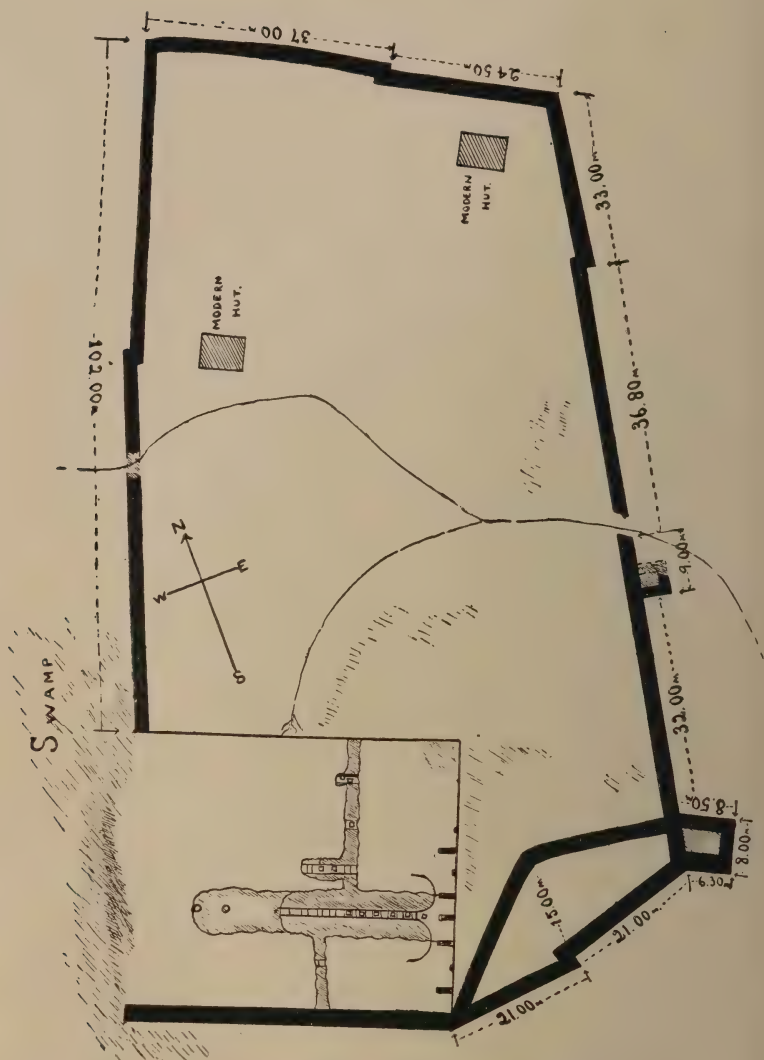


FIGURE 12.—PLAN OF THE FORTIFICATIONS AT THE HARBOR OF OENIADAE.

0.48 m. in thickness, and projects 0.55 m. into the passageway. Leake¹ says that this projection corresponded to a

¹ Cf. Leake, *Northern Greece*, vol. III, pp. 559 f. Leake's sketch plan of the fortifications at this point is very inaccurate, as may be seen by a comparison of the accompanying reproduction (Fig. 14) with my plan (Fig. 12).

retiring on the other side of the passage, but I did not find this to be the case.

Just back of this projection into the passageway is a hole used in fastening the gate; this measures 0.26 m. in height, and is 0.22 m. in width at the top, but midway on its right side an angle is formed, and the lower half is only 0.13 m. in width. On the other side of the passage are two smaller



FIGURE 13. — ARCHED GATEWAY IN FORTIFICATIONS AT OENIADAE;
LOOKING OUTWARD.

holes. The opening of the passage is covered by a nearly semi-circular arch, made up of nine stones;¹ it seems to me, contrary to Leake's opinion, that the passage was not arched throughout, for no trace of vaulting appears on the side walls, which are preserved to a height above the spring of the existing arch. Above the top of the arch appears a small quadrangular window, bounded by three stones resting on the horizontal course of masonry, which continues the wall above the arch.

¹ Another similar gate is found in the ruins at Kekhropoula (Palaerus), a few hours west of the town of Leucas.

This may have been merely a port for commanding a view from the wall directly above the gate ; it seems unlikely that it could have given light to the passageway, as Leake thought, for, if the passage was covered, that was impossible ; and, furthermore, was absolutely unnecessary.

The possibility suggests itself that a stone may have been lost out of this opening, and that it was not originally intended for a window ; this, however, is not probable.

At the present time no other gateway into the enclosure is preserved, but if we examine the drawing (Fig. 15) which Cyriacus of Ancona appends to his description of Trigardo, the existence of another seems

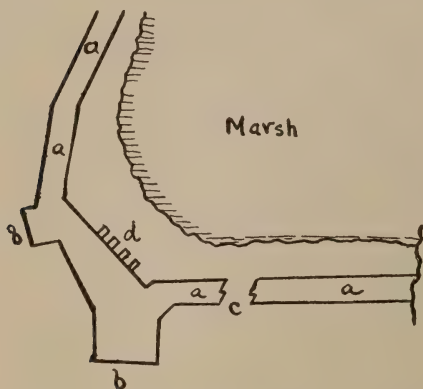


FIGURE 14. — LEAKE'S PLAN OF THE FORTIFICATIONS AT THE HARBOR OF OENIADAE.

probable. This drawing can be nothing else than a view of the ship-sheds, looking toward the southeast. The five uprights cut in the rock are shown as they exist to-day, and also the rock-hewn side at the right, pieced out with polygonal masonry.¹ At the left is seen a section of wall with a gateway, which is evidently in front (*i.e.* to the west) of the back wall of the

¹ The inscription *Ἀριτίδας*, given by Cyriacus, was not observed by me, because, when last at Oeniadae, I had not seen this drawing. Cf. *C.I.G.* 1796 ; Lebas, II, no. 1037 ; Bezzenberger, *Beiträge*, VII, p. 247. I am now, however, able to give additional information, through the kindness of Mr. D. M. Robinson, who visited Oeniadae in April, 1903, and, at my request, examined the surface of the natural rock which forms the southern wall of the ship-sheds. He found letters at a distance of about 9 m. from the rear wall of the ship-sheds, and about 1.50 m. down from the top of the native rock. The letters are about 0.17 m. in height, and extend over a space of 1.50 m. Remains of five letters can be made out : first P, then I, some of the strokes of Σ, an upright stroke forming I or part of T, and finally, clearest of all, an equilateral Δ. These letters (of the fourth century B.C. or later) were roughly cut, and the traces are now so faint that no exact measurements can be taken. Weil, *l.c.* p. 352, is thus in error.

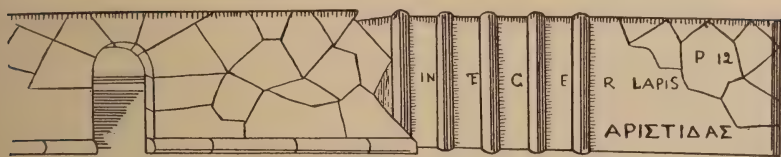


FIGURE 15. — DRAWING BY CYRIACUS OF ANCONA.

ship-sheds, and so cannot be a representation of the wall and the gate that has already been described. Cyriacus shows the doorway, covered by a true arch, and it seems likely that it was built, where we now find a gap in the western wall, near the wattled hut of the peasant who here tills a small garden and watches over his swarms of honey bees; this is the only spot in the small circuit where the wall is totally destroyed.

The whole enclosure represents one of the "two citadels guarded by towers at their angles," which Cyriacus mentions; but, although the acropolis has towers at nearly all its angles, here at the port there is a tower at only one corner.¹ A second in this circuit is found just to the left of the large arched gateway in the eastern wall; this is now in a ruined condition, and but one corner of it is preserved. The large tower at the southeastern angle (called *κοκκινόπυργος* locally) is well preserved; it is constructed with squared courses of Hellenic masonry about 0.75 m. in height (Fig. 16). Above the first ten courses, which appear above ground, is a narrower projecting course, and above this the thicker courses continue again. The tower is preserved at one angle to a height of 11.88 m.²

¹ Cf. Schillbach, 'Ausflug nach Oeniadae in Akarnanien,' *Zeit. d. Gesell. für Erdkunde zu Berlin*, 1872, vol. VII, p. 110. Schillbach mentions this large tower as the best preserved of three, and says that it stands between two others. No clear traces of a tower are now evident to the west of the large one, but one may have stood just above the ship-sheds. Leake's sketch (Fig. 14) may be interpreted as representing such a tower to the left of the large tower—in that case he omits the one near the arched gateway. Possibly Schillbach and Leake mistook the projection in the wall for the foundation of a tower. The irregular lozenge-shaped space at this point really serves as a small acropolis for the fortifications of the port.

² Cf. F. Noack, 'Untersuchungen und Aufnahmen griechischer Stadt- und Burgruinen im westlichen Lokris, Aetolien und Akarnanien,' *Berl. Phil. Woch.* vol. XVII (1897), p. 700.

Above the projecting course are traces of two embrasures in the front face of the tower and of one at the side. Inside the tower lie some blocks which have squared cuttings to receive roof or floor beams.

One passage in Polybius (IV, 65) has given rise to much discussion concerning the dating of the walls at Oeniadae, and it is necessary to examine this closely in order to get a clear



FIGURE 16. — LARGE TOWER IN THE FORTIFICATIONS AT THE HARBOR OF OENIADAE.

understanding of the facts; whether or not the questions can be definitely settled is another matter. Polybius tells us that when Philip V made his incursion into Acarnania in 219 B.C., he took a number of cities and finally the small town of Paeanium. "Of this he razed the whole wall to the ground, and breaking up the houses, he set the lumber and the tiles on rafts, and then came down the river to Oeniadae with great ambition. The Aetolians first undertook to guard the citadel at Oeniadae, making it secure by means of walls and other

works; but when Philip drew near, they became panic-stricken and evacuated the town. The king then took possession also of this city, and, setting out from it, he made an expedition against a certain strong town in the province of Calydon, called Elaüs. This town was especially well fortified with walls and other works, for Attalus had undertaken the fortification of it for the Aetolians. The Macedonians took this town by storm and overran the whole province of Calydon, but finally went back to Oeniadae. And Philip, being struck with the happy situation (*εὐκαιρίαν*) of the place, among other things, for the crossing into the Peloponnese, undertook to fortify the city; for Oeniadae happens to lie near the sea at the extremity of Acarnania where it joins Aetolia, at about the beginning of the Corinthian Gulf. . . . With this end in view, he fortified the citadel by itself (*τὴν ἄκραν καθ' αὐτὴν ἡσφαλίσατο*), and then surrounding with a wall both the dockyards and the harbor together, he tried to join them to the citadel (*συνάψαι πρὸς τὴν ἄκραν*), using for the work the materials from Paeanium." Philip, however, was obliged to hurry away without completing his work.

The question is, What are we to regard as the work of Philip in the walls of Oeniadae as they now stand?

Leake¹ considered the towers as later additions to the walls and so as the probable work of Philip. Mure² follows Leake in his conclusions, but neither of these two made a thorough examination of Oeniadae or of other Acarnanian sites. Heuzey,³ although considering the towers of squared masonry as later additions, thinks that the wall of small stones near the acropolis was the hurried work of the Aetolians, and that the wall extending down the hillside from the great tower at this southern corner was the work of Philip. He thinks with Leake (*loc. cit.* p. 568) that Philip was trying to connect the acropolis with a supposed port on the Achelouïs, which is here

¹ *Northern Greece*, vol. III, p. 563.

² *Journal of a Tour in Greece*, vol. I, p. 109.

³ *L'Acarnanie*, pp. 441 f.

one and a half kilometres distant. Oberhummer (cf. his note on p. 162 of his work) agrees with Heuzey. It is, of course, possible that Oeniadae had a port on the Acheloiüs, but we have no direct evidence of the fact. Cyriacus, in his description, indeed, says that Trigardo had "a port toward the south in view of the island of Ithaca," but he is describing Trigardo itself, and does not refer to something a long distance away. He may be mistaken in his direction, and refer to the harbor at the northern end of the city; a view of Ithaca is commanded from a point near this harbor, as well as from any other high part of the city,¹ but, at the best, its outline can just be made out against Cephallenia lying behind. Heuzey, however, makes no mention of this statement by Cyriacus as a support for his theory.

Noack² says that in Acarnania, where the walls of cities are constructed in the polygonal style, the towers are always made with horizontal courses, and that there can be no difference in age, for they are knit together, and the towers do not go through the wall and project inward, but project outward only. He mentions the large tower at Kekhropoula (Palaerus), existing to a height of 10 m. and constructed of quadrangular courses against a wall of polygonal masonry. At Palaeo-Manina I have seen, near a gateway in the acropolis, a large tower constructed with horizontal quadrangular courses. The walls at Palaeo-Manina are polygonal for the most part, but near this gateway such is not the case. (Fig. 17.) The towers at Oeniadae spring directly from a fine polygonal wall, and some polygonal blocks even run out into the tower, as though the main wall had been broken and the tower inserted; whether this is the case at Palaerus is doubtful. (Cf. Fig. 16.)

Let us now sift the evidence for ourselves. Polybius says that the Aetolians did some work toward fortifying the acropolis; this may very well refer to all the walls of small stones

¹ This harbor opens out toward the northwest in a straight line with the open sea south of Leucas, between that island and Ithaca.

² Cf. *Berl. Phil. Woch.* 1897, p. 700.

which we have seen in that vicinity. Next, Philip fortified the citadel by itself; notwithstanding Noack's general conclusion that walls of polygonal masonry and towers of squared Hellenic courses were constructed simultaneously in any given city of Acarnania where instances are found (for his arguments are not final¹), we may suppose that the towers of horizontal



FIGURE 17.—GATEWAY IN ACROPOLIS AT PALAEO-MANINA.

courses at the acropolis were made by the Macedonian king, since they resemble the towers at the port, which we shall now consider.

According to Polybius, Philip next surrounded the harbor and the dockyards with a wall. Why should we follow Leake

¹ Noack draws a general conclusion from instances which are not all alike. To say, in addition, that the towers and wall are knit together is not an argument, for, if the towers at Oeniadae are of late construction, they would certainly then be bound into the main wall. That they do not pass entirely through the wall is also a point in favor of their later construction.

and Heuzey in forsaking the plain example of harbor and arsenal before our eyes in the northern part of the city and go searching for one on the Acheloüs a long distance away? Polybius probably has reference to the towers and other repairs that Philip made in the ancient walls at this point. Inside the large tower at the southeastern corner of enclosure at this harbor was found a broken tile (Fig. 18, *a*), stamped with the name of Philip—ΦΙΛΙΠ[ΠΟΥ]. The letters are 0.02 m. in height, and their style is of the third century B.C., even if the name is not really that of the Macedonian king. I assume that

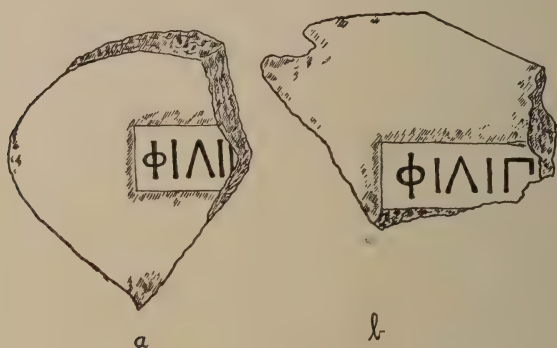


FIGURE 18.—*a*. TILE FOUND IN LARGE TOWER. *b*. TILE FOUND IN SHIP-SHEDS.

this tile does refer to King Philip and that it formed part of the roof of this tower. In the ship-sheds, far below this tower, was found another fragment of tile with the same stamp (Fig. 18, *b*), and I take it that this also came from the tower, since it is more likely that a tile from the tower would fall down into the ship-sheds than that one from the ship-sheds should find its way up to the tower.

Philip next undertook to join the works at the harbor to the citadel, and used the materials taken from Paeanium, which probably included stones from the walls. Here we find the cause of all the theorizing in the writers already mentioned, for no one seems to have noticed that, as I have already shown, the fortifications at the port are not, and never have been,

connected with the acropolis, for they are not joined to the main wall at any point.

It may be that Philip tried to extend the wall which runs down into the swamp north of Gate 10, but did not complete it before his departure for Macedonia. In the materials from Paeanium (which had a circuit of less than 1290 m.) he would probably have at hand both quadrangular and polygonal blocks from the walls; the walls of that town may have had the outer face of quadrangular blocks and the inner of polygonal, as is the case in the walls at Karavassaras. Philip may have used these quadrangular blocks for his towers.

Still another remarkable feature of the site of Oeniadae is constituted by the two great natural cisterns, which excited the admiration of Cyriacus. The larger of these is on the western side of the city, near Gate 2; the other is on the eastern side not far from the theatre. Both are outside the walls and at a great depth below them, but water could be drawn up from the depths by a person standing on the plateau above. The line of the city walls is broken at both these points, for the precipitous descent rendered fortification unnecessary. The cisterns now show little evidence of having been worked by hand, as Cyriacus says they were in his day. They are known to the natives as *ἡ μικρὴ λάμια* and *ἡ τρανὴ λάμια*; these names would indicate that some folk-tales were connected with them. Dr. Schillbach,¹ who saw these cisterns in 1857, says that an innkeeper in Katoché told him that formerly a staircase, hewn out of the rock, led down into one of them, but about ten years before (*i.e.* c. 1847) the rock had been broken away and carried the whole stairway down into the cavern.

The water in the cisterns remains constant at about the level of the marshy plain. The larger of the two has a diameter of about 60 m.; its depth I had no means of determining.

Other small cisterns, now dry and filled with rubbish, are found throughout the enclosure, and at different points all over the surface of the plateau traces of buildings are to be

¹ Cf. *Zeit. d. Gesell. für Erdkunde zu Berlin*, 1872, vol. VII, p. 110.

seen; this is particularly the case just southwest of the theatre, where some long lines of walls may mark the site of the agora.

A necropolis is indicated on Heuzey's plan just outside the northernmost projection of the walls, because the peasants called the place *τὰ μνήματα*. No traces of buildings or tombs now appear, and the whole ridge at this point seems to be nothing but bare rock.

The excavations, which are hereafter described, were made at what were considered the five most promising points, but there are other spots where digging could be carried on with equal or possibly greater profit.

The insalubrity of the situation of Oeniadae probably caused its desertion in the Middle Ages, but in early times, as Leake says,¹ compared with the protection which the swamp gave the city, the general health was a question of small importance. Leake is of the opinion that the swamp could never have been drained to any extent; but we know that there must have been a deep channel connecting the harbor at the north of the city with the sea, and, furthermore, the swamp formerly did not come so close to the city, for the bath-house, at the inner end of this harbor, must have been above the level of the water, whereas the soil about it is now boggy, and during the excavation water flowed in in such quantities as completely to fill the excavated space in a few days.

As Thucydides has said,² it is wellnigh impossible to make a campaign against Oeniadae in the winter; we learned this to our sorrow when the rains broke in January, and the trip to and from Katoché was made through mud and water ankle deep. The few wandering Vlachs retire from the plain at this season, erect their small wattled huts at Triardo, and find abundant food for their droves of pigs in the acorns from the oaks with which the site is covered. These oaks form the southern outpost of the great forest of veláni, which covers

¹ Leake, *Northern Greece*, vol. III, p. 564.

² Thucyd. II, 102, 2 (ὁ Ἀχελῷος) ἀπορον ποιεῖ ὑπὸ τοῦ ὕδατος ἐν χειμῶνι στρατεύειν.

the uplands of Acarnania between the Acheloüs and the seashore.

It is in the springtime that the full beauty of the site can best be appreciated. The oak grove is then a sea of green, rippling in the sunlight; the earth is covered with grass and flowers—narcissus, yellow sage, daisies, and asphodel. Great green lizards scuttle through the grass; snakes bask lazily on the rocks in the sunshine, and flocks of goats and small herds of buffaloes roam about cropping the herbage; the whole scene seems a fit setting for an idyll by Theocritus.

BENJAMIN POWELL.

OENIADAE

II

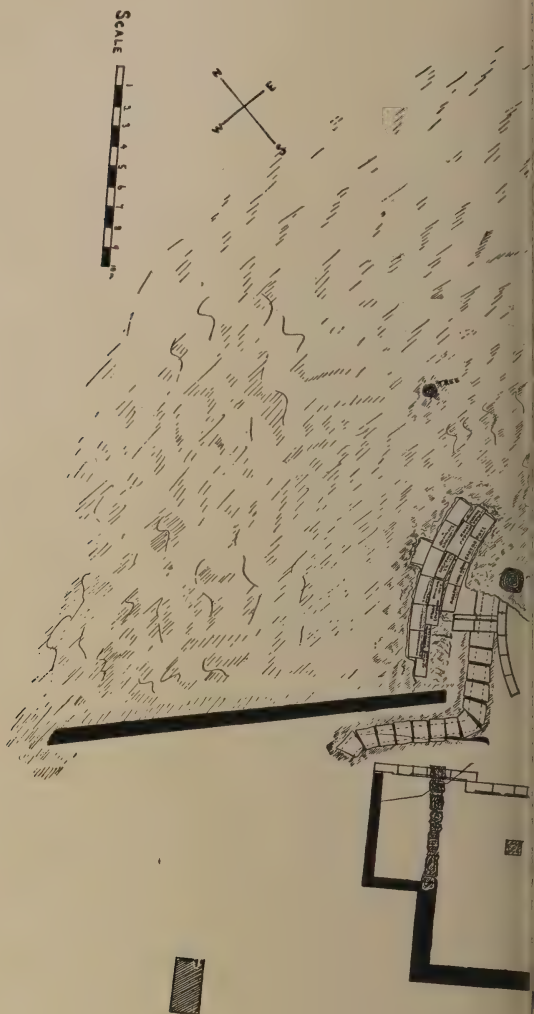
THE THEATRE

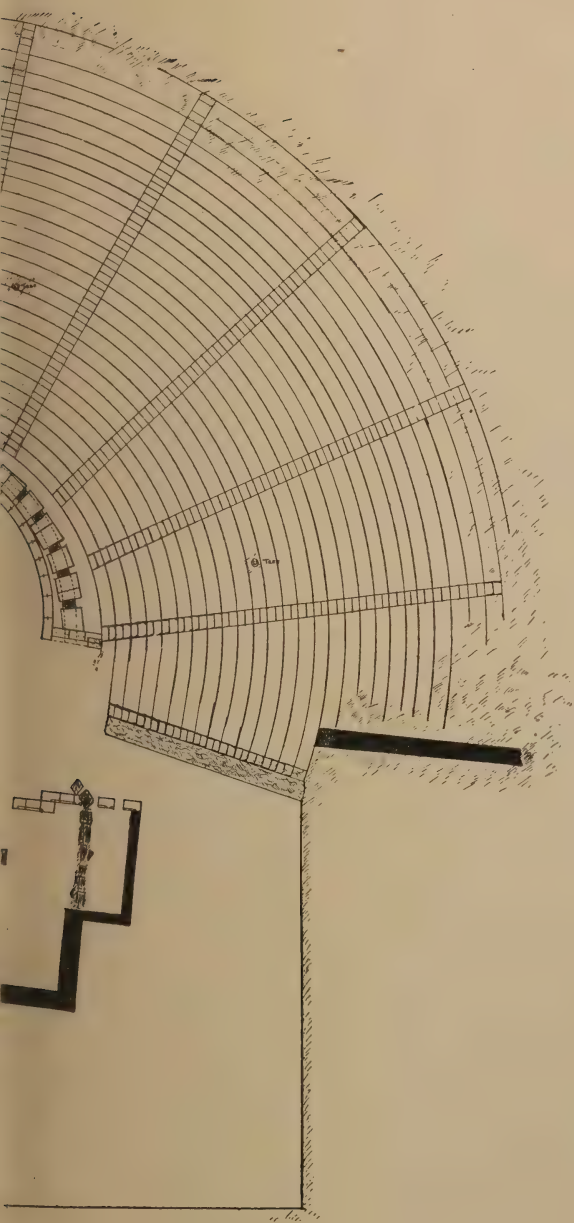
[PLATE VIII]

THE theatre at Oeniadae, which is to-day known by the peasants as τὸ παργυῖδες, is situated in the eastern part of the enclosure formed by the walls of the city. Although it is but a short distance from the wall on this eastern side, it is separated from it by a steep hill which rises in this part of the city. The theatre was built in the western slope of this hill and faces toward the southwest, commanding a view across the breadth of the enclosure, dotted with oak trees, to the lower marshy plain and the mouth of the Acheloüs with the blue sea and Echinades islands beyond. The site is easily reached by taking the path which passes through the great gate in the wall northeast from the acropolis (*i.e.* Gate 9), and following this northward toward the ancient harbor; the theatre lies to the right of this path, which probably follows the line of an ancient street, traces of which may still be seen near the theatre.

The work of excavating the theatre was all done in the latter half of the month of December, 1900, with the exception of some few days of labor in the following May; these were spent in uncovering the inscribed seat blocks in the western part of the cavea.

It was decided to lay bare but half of the orchestra and cavea, and the eastern half was selected, thus leaving undis-





turbed a large oak tree which had grown up in the western side of the orchestra (cf. PLATE VIII). The greatest accumulation of earth, about 1 m. in depth, was immediately at the foot of the tiers of seats (cf. Fig. 19). This deposit consisted of a fine, dark leaf mould, which had been formed in the course of years from the decaying leaves of the trees growing near at hand, and, mixed with it, fragments of rock and small stones,



FIGURE 19.—THE THEATRE AT OENIADAE.

Eastern Side of the Orchestra, showing the Curb and the Covering over Drain.

which had rolled down the slope from above. The deposit became gradually thinner as the stage-buildings were approached, and over these it was comparatively insignificant, amounting to only a few centimetres.

Cyriacus of Ancona, who visited Acarnania in the month of February, 1436, is the first writer to make mention of a theatre at Oeniadae, or Trigardo, under which title he describes the site. The cavea of the theatre was then in a more perfect state of preservation than it is at present, for Cyriacus counted

thirty rows of seats — “in medio civitatis theatrum XXX. gradibus altitudinis.” This was probably close to the original number, for the slope of the hill, where the theatre is built, would not admit the placing of more rows without artificially enlarging the cavea with embankments and retaining walls.

Colonel Leake, who visited the spot in April, 1809,¹ could then count twenty-five rows of seats cut from the rock, and saw “some foundations of a proscenium projecting forty-five feet,” whatever that may mean. Sir William Mure,² who followed in Leake’s footsteps in 1838, could not find the ruin at all, and, indeed, without a knowledge of its exact location within the city walls, one might pass, before the excavation, within a few paces without observing the edges of the rock-cut seats projecting from the earth. Heuzey,³ who came in 1856, claims to have counted thirty rows, but the existence of this number at that time seems to have been impossible, for Schillbach,⁴ who visited Oeniadae in October, 1857, counted only eighteen rows, and judged Heuzey to be mistaken in his count. Bursian,⁵ a few years later, mentions but twenty rows, and, even after the excavation, I have been unable to find traces of so many as thirty. In a careful examination before the excavation, I could count but twenty-one rows, and, in the end, this number was increased by only six, making a total of twenty-seven rows, of which traces may now be seen.

A. THE CAVEA

The whole eastern part of the cavea of the theatre is cut from the solid rock of the hillside, which is a gray limestone formation. Such being the case, the cavea needs no supporting wall of masonry to divide it from the eastern parodos. The rock

¹ Cf. W. M. Leake, *Northern Greece*, vol. III, p. 561.

² William Mure, *Journal of a Tour in Greece*, vol. I, p. 109.

³ Heuzey, *L’Acarnanie*, p. 445 : “On y compte une trentaine de gradins sur un rayon d’environ douze mètres.” Knowing the breadth of the seats, this statement is a manifest impossibility.

⁴ *Ztschr. d. Gesell. f. Erdkunde zu Berlin*, 1872, vol. VII, p. 113.

⁵ Bursian, *Geog. von Griechenland*, vol. II, p. 121.

itself at this point is cut into a smooth, vertical surface, and serves as a boundary wall. This rock wall extends from the bottom row of seats for a distance of 10.35 m., inclining toward the stage-building. At this point the outcropping of rock lacked the requisite height to serve as a retaining wall for more than the fifteen lower rows of seats. The line was broken at this point, and was resumed at a distance of 2.80 m. toward the middle of the first wedge of seats. From this point a supporting wall of masonry was constructed, not, however, continuing in the same direction as the rock-cut wall of the parodos, but running in a line nearly parallel with the proscenium. This wall is built of large blocks of masonry, which can hardly be termed polygonal in comparison with the work on the walls of the city, for the stones are rough and unshapen and more Cyclopean in style.¹ The wall is not intact, being preserved for a length of only 8 m. or 9 m., and to a height of 1 m. or 1.50 m.

In contrast to the irregular boundary of the cavea on the east, we find at the west a retaining wall of regular Hellenic masonry, with four courses remaining. The first course is imbedded in the earth; the second measures 0.52 m. in height; the third, 0.615 m.; and the fourth, 0.475 m. The wall is preserved for a distance of 19.80 m., but is in a hopelessly ruined condition at its outer end. The block at the inner end of each course is bevelled to fit the slope of the cavea. This wall was necessary at the west, because the natural rock failed on this side, and the cavea was pieced out with an embankment, and seats, formed of blocks of white limestone, were inserted.

The space between the bottom row of seats and the curb of the orchestra broadens as one approaches the parodoi from either side; at the back the width is but 2.05 m., while at the side it is 2.60 m. This would lead one to suppose that the line of the seats was elliptical, with the two foci of the ellipse at a distance of 3.30 m. on each side of the centre of the orchestra, since the length from the centre of the orchestra

¹ Cf. Bursian, *Geog. von Griechenland*, vol. II, p. 121.

back to the first row of seats is 9.65 m. along the axis of the theatre. But, inasmuch as the curve does not begin to turn inward after passing the transverse axis of the theatre, I assume that the lines of seats are parts of a circle, and the centre used for describing them was from 0.60 m. to 0.75 m.¹ nearer to the stage-building than the centre of the orchestra. The radius used for describing the line of the lower row had a length of about 10.50 m.

Another peculiarity is that the aisles, or flights of small steps or wedges which divide the cavea into cunei, do not radiate from the point used in describing the lines of seats, but centre at a point about 1.45 m. nearer to the stage-building; this tends to decrease the space in each wedge, excepting the one at the outside, whose outside aisle is a radius of the circle of the seats.² This would have made this last wedge of seats broader at the top than the others, if it had not been contracted by a secondary boundary wall, as previously described.

We thus have three different centres used in the construction of the theatre: first, that of the orchestra; second, the centre used in describing the lines of seats; and third, a centre for the aisles.

The rows of seats are, on an average, 0.70 m. in breadth and are 0.345 m. in height,³ so that the pitch of the cavea is 27.5° above the horizontal. (Cf. Fig. 20.)

¹ The work in the cutting of the rock for the cavea and in the theatre generally is so rude that some of the measurements cannot be determined with any degree of accuracy.

² The wall of Hellenic masonry, supporting the cavea at the west, radiates from the same centre as the inner aisles; so it is in a line with the aisle bounding the inner side of the first eastern wedge.

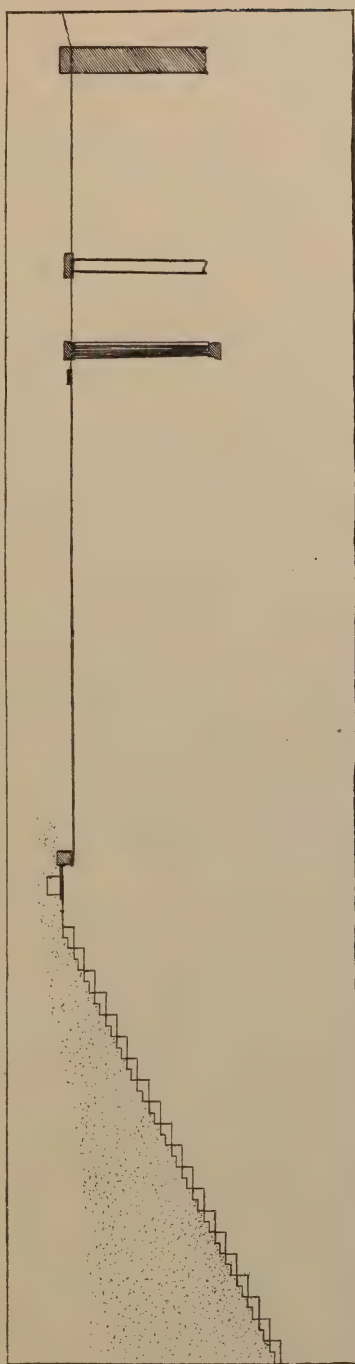
³ This is about the normal measurement found in Greek theatres, *e.g.* Athens, Piraeus, and Eretria, 0.32 m.; Corinth, 0.33 m. (?) ; Epidaurus, 0.34 m.; Sicyon and Thoricus, 0.35 m.; Megalopolis, 0.37 m. The seat-blocks at Corinth were 0.33 m. in thickness, but the level of each successive tier was only 0.25 m. above the preceding. (Cf. *Am. J. Arch.* 1897, vol. I, pp. 483, 487.) It seems to me that since the seat-blocks in the theatre at Corinth were only 0.35 m. in width, and the additional space of 0.35 m. was packed with earth, this space was sunk to a lower level than the surface of the block, thus giving room for the feet of the spectators and allowing the full height of the block to appear. Of course, the pitch of the cavea was only 20° above the horizontal.

Beginning at the rock-cut wall bounding the eastern parodos, we find first a mass of rock left to a width of 0.85 m. and next a flight of small steps, which measures but 0.66 m. across; so that, besides differing from the other aisles in its centre of radiation, it differs also from them in its width, for they are 0.75 m. across. In these aisles there are two steps at the end of each row of seats, so that these steps are only 0.35 m. in depth and have risers 0.175 m. in height. On the east the first wedge of seats has a breadth of 3.25 m. along the edge of the second¹ row; the next wedge measures 3.27 m. on the same row, and this space is continued in the following cunei.

The cavea forms somewhat more than a half-circle, but the lines of seats, after passing the transverse axis, become tangent to the circle, and, instead of inclining

¹ I give the measurement for the second row, because what is really the first row does not appear until after the descent into the space between the seats and the curb of the orchestra.

FIGURE 20. — THEATRE AT OENIADAE. CROSS-SECTION SHOWING PITCH OF CAVEA.



inward toward the proscenium, they continue toward it at right angles for a distance of *c.* 2.70 m. farther.

The eastern half of the cavea shows five cunei of rock-cut seats, together with one-half of a sixth, which formed the centre. From this, one would conclude that the whole number of cunei was eleven. The western half of the cavea, however, seems to have been somewhat irregular.

On the eastern side the descent to the covered drain comes at the foot of the aisle bounding the first wedge of seats at its inner side. This descent occurs on the west at the same distance from the retaining wall, but here we find no aisle. For the space of three normal cunei the natural rock was pieced out, on this western side, with large blocks of white limestone to form the seats. The remains of the lowest of these rows of seats begin at the descent to the covered drain, and four blocks are to be seen. The combined lengths of these blocks amount to 5.09 m., which is a much greater space than is required for the bottom row of any normal wedge. We know that these four blocks were always in the same relative position, because an inscription of two lines extends across all four. At the inner end of this row the natural rock begins, and probably an aisle was constructed at that point. Here, then, we have the space for three wedges with no trace of an aisle. We are forced to believe that some other arrangement was made in this part of the theatre, for it is incredible that the blocks in the three rows that we found could have slipped down the slope to their present position and preserved their alignment, as they have done. Not until the eleventh row of seats could the space of 5.09 m. be found between the aisles in the eastern half of the cavea, and, moreover, there are no remains apparent which could have formed lower rows of normal length. Three rows of these inserted seats appear and one stone of a fourth—one other block, that undoubtedly belonged with these, lies on the curb, bounding the orchestra on the west side.

No trace of a break for an aisle occurs in any of the three

rows, the two upper of which extend farther toward the western parodos and are much greater in length than the lower. The arrangement of these blocks can best be seen by a reference to Figs. 21, 22, and PLATE VIII.

The first block of the lowest row begins at a distance of 0.15 m. from the lower step of the descent to the drain. All



FIGURE 21.—THE SEATS OF MASONRY IN THE WESTERN HALF OF THE CAVEA OF THE THEATRE AT OENIADAE.

of the blocks are of the same relative thickness,—that is, about 0.345 m., which is the height of the rock-cut seats.

I give the inscriptions found upon the seats in these three rows, beginning with the lowest row (Fig. 22). The letters of all the inscriptions agree with one another in their general character; and, although some are more carefully cut than others, yet, as a whole, they are characterized by the broadened apices at the ends of the straight strokes. We find ξ invariably made with flaring upper and lower strokes, except in the name *Ὀνόσιμον*, found on the first block of the lowest row, and in

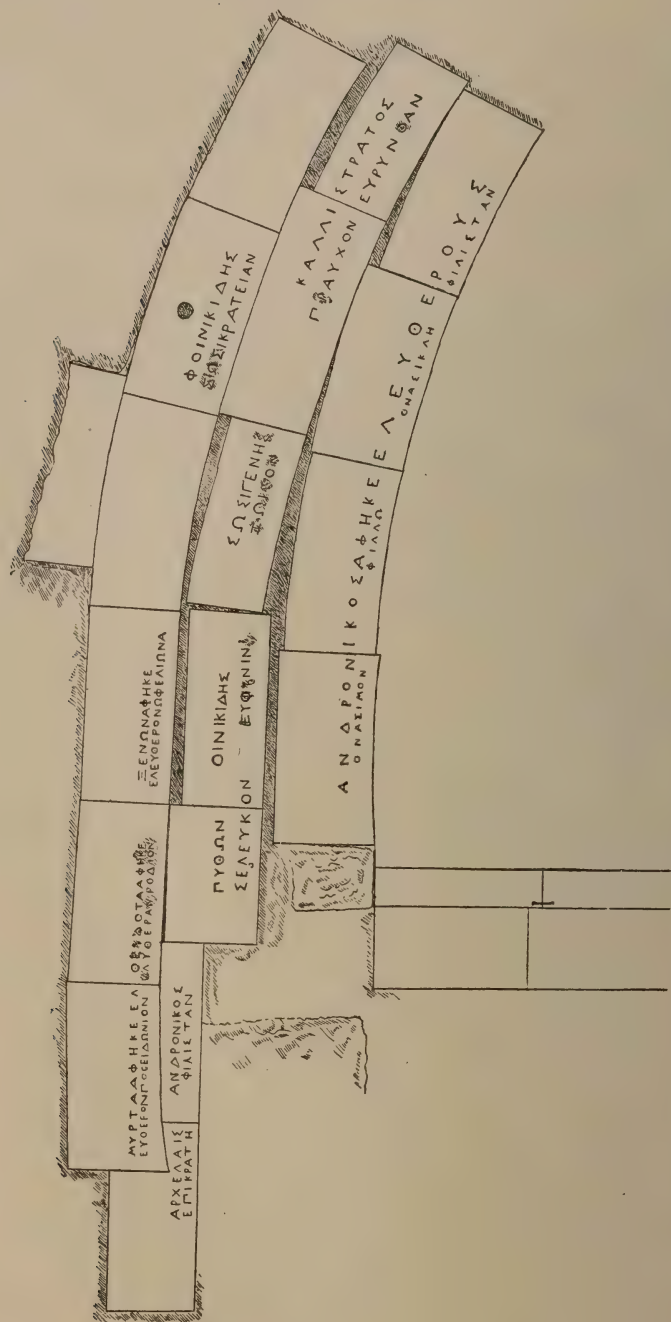


FIGURE 22. — THE INSCRIPTIONS ON THE SEATS OF MASONRY IN THE WESTERN HALF OF THE CAVEA OF THE THEATRE AT OENIADAE.

the curved form C, seen on the first stone of the highest row. From the letter forms in general and the finding of both ξ and C, it seems safe to date the inscriptions in the latter part of the third or at the beginning of the second century B.C.

The inscriptions also agree in content, and all state that a certain person set free a certain slave or slaves. The verb is not always expressed, and in that case there is engraved simply the name of the master in the nominative, followed by that of the freed slave in the accusative-case. We notice both men and women as masters of slaves at Oeniadae and both male and female slaves. The formula ἀφῆκε ἐλεύθερον, although not commonly found, is, nevertheless, known from other inscriptions.¹

The four blocks of the lower row are used for one inscription; the first stone is 1.30 m. in length and 0.69 m. in width; the second, 1.27 m. in length and 0.61 m. in width; the third, 1.25 m. in length and 0.63 m. in width; the fourth, 1.27 m. in length and 0.58 m. in width. The letters in the first line of the inscription are from 0.05 m. to 0.065 m. in height, while those of the second measure only 0.035 m.

1. Ἀνδρόνικος ἀφῆκε ἐλευθέρους
Ὀνάσιμον, Φιλλῶ, Ὀνασικλῆ, Φιλίσταν.

The Doric forms are to be noticed in the names in this inscription, as also in the following nos. 3, 7, 8, and 9. From the grouping of the four names of the slaves, male and female alternately, we may suppose that each pair were man and wife. The name Phillo occurs, according to Pittakis, for the first time in an Attic inscription, published by him in Ἐφ. Ἀρχ., 1859, p. 1828, no. 3500. In *C.I.A.* II, 988, however, this case is read as Κιλλῶ. In *C.I.A.* II, 3012, we find the undoubted reading Φιλλῶ Θηβαία.

The first stone of the second row is 1.29 m. in length and 0.61 m. in width; the upper right-hand corner of it, however,

¹ Cf. *C.I.G. Gr. Septentr.* vol. I, no. 1779 (from Thespieae); no. 1780 (from Thespieae), and no. 3321 (from Chaeronea).

is covered by the end block of the third row, so that it shows only a width of 0.18 m. for a distance of 0.33 m. from the right end. The end of the inscription comes on this narrow band. The letters are 0.06 m. in height.

2. Ἀρχελαΐς
Ἐπικράτη.

The second stone of the second row is 1.23 m. in length, but only about 0.28 m. of its width projects from under the block in the row above. The letters are from 0.05 m. to 0.06 m. in height.

3. Ἀνδρόνικος
Φιλίσταν.

This may refer to the same master and one of the slaves of the first inscription. In that case we may suppose this inscription to be slightly older; when Andronicus freed other slaves he had Philista's name inscribed also among them.

The third stone of the second row is 0.93 m. in length and 0.625 m. in width. The alignment of this stone, and the others which follow it in the row, is 0.35 m. in front of the two preceding stones. The letters are about 0.06 m. in height; they are poorly cut and are not in perfect alignment. The two last letters of the second name run over on the next block to the right.

4. Πύθων
Σέλευκον.

The fourth stone of the second row is 1.35 m. in length and 0.55 m. in width. The letters are 0.06 m. in height.

5. Οἰνικίδης
Εὐθυνην.

Both the name of the master, Oenicides, and that of the female slave, Euthynis, occur here, I believe, for the first time.

The fifth stone of the second row is 1.29 m. in length and 0.53 m. in width. The letters are roughly cut and are *c.* 0.05 m. in height.

6. Σωσιγένης
Ζωί[λ]ον.

The sixth stone of the second row is 1.54 m. in length and 0.62 m. in width; the inscription runs over the seventh stone also, which is 1.10 m. in length and 0.54 m. in width. The letters are 0.07 m. in height.

7. Καλλίστρατος
Π[ρ]αῦχον, Εὐρυν[δ]αν.

The first stone of the third row is 1.28 m. in length and 0.65 m. in width. The letters are from 0.045 m. to 0.055 m. in height.

8. Μύρτα ἀφήκε ἐλ-
εύθερον Ποσειδώνιον.

The form *Μύρτα* is not found elsewhere, but *Μύρτος*, *Μυρτώ*, and *Μυρτίς* are common.

The second stone of the third row is 1.24 m. in length and 0.65 m. in width; the letters are 0.045 m. in height.

9. Θευδότα ἀφήκε
[ἐ]λ(ε)υθέραν Ῥόδιον.

The second E of *ἐλευθέραν* seems to have been omitted by the stone-cutter.

The third stone of the third row is 1.29 m. in length and 0.65 m. in width. The letters are 0.045 m. in height.

10. Ξένων ἀφήκε
ἐλεύθερον Ὀφελίωνα.

The fourth stone of the third row is blank; it is 1.34 m. in length. The fifth stone is 1.29 m. in length and 0.67 m. in width;

the letters of its inscription are poorly cut and are 0.07 m. in height. A circular hole, 0.11 m. in diameter, is cut in the stone at a distance of 0.63 m. from the left end and 0.37 m. from the bottom ; its purpose is uncertain.

11.

Φοινικίδης
Σωσικράτειαν.

The sixth block, which ends this third row, is uninscribed. Only one block of a fourth series was brought to light, and that bore no inscription. Additional excavation might increase our knowledge of the arrangement of the cunei in the western half of the cavea and discover additional inscribed seat-blocks ; only a complete clearing of the whole western slope would make it certain that no more were *in situ*. It seems probable that the space between the end of the natural rock and the western supporting wall of the cavea was filled with one great wedge, with seats of masonry, occupying the space of three normal wedges ; or again it is possible that this part of the theatre was never completed.

B. THE ORCHESTRA

The steadily widening space between the lowest row of seats and the raised curb bounding the circle of the orchestra has already been mentioned. At the aisle, between the first and second cunei on the east, the bottom row of seats is bound across to this curb by a series of white limestone blocks, which formed a descent of two steps (0.33 m.) from the level of the orchestra to the sunken space where was constructed a canal for carrying away the rain-water as it flowed down from the seats above. The same construction is found also at the corresponding place on the west side of the orchestra. From these points onward toward the stage-buildings the surface of the ground is on a level with that of the orchestra circle.

Of the blocks forming the upper of the two steps on the east, only one remains in place at the end toward the seats ; this

block is 0.70 m. in length and 0.49 m. in width. It projects 0.11 m. into the aisle at this point; the lower step is formed of three blocks which project 0.31 m. farther. These three blocks of the lower step were fastened together with clamps, which were hidden from view by the upper step. The two steps on the western side are preserved intact. They are formed of two blocks each; the two blocks of the upper step are respectively 1.05 m. and 1.20 m. in length and 0.56 m. in width, while the two lower are 1.15 m. and 1.095 m. in length, and appear for a width of 0.26 m.

The sunken space between the curb of the orchestra and the seats is partially paved with large plaques of white limestone, about 0.10 m. in thickness. These serve not so much as paving stones as covering for the drain which begins at the eastern side of the orchestra and passes around to the western parodos (cf. Fig. 19). Owing to the slope of the hill toward the northwest, there could be no outlet for the water on the eastern side, hence it was all carried around to the one outlet on the west. At the point where it begins (*i.e.* at the steps on the eastern side of the orchestra), this drain is 0.70 m. out from the curb of the orchestra; but at the fifth space between the plaques covering it, it is only 0.34 m. from the curb. The canal is here cut in the natural rock, and is 0.58 m. in width and 0.39 m. in depth. After passing around the orchestra, it goes out under the two steps on the western side, continues to the western parodos, and there turns at nearly right angles through it. After passing beneath the two steps, the drain was covered by irregularly shaped plaques placed close together; thirteen of these were uncovered, the drain being followed only through the western parodos. These last plaques, of course, did not appear in the finished theatre, but were covered by a considerable depth of earth. A steady slope is perceived in the course of the drain, which on the western side of the orchestra is 0.50 m. wide and 0.56 m. in depth.

The large plaques covering the drain on the eastern side of the orchestra have in general a length of 1.09 m., which is

about half the distance from the curb of the orchestra to the seats (cf. Fig. 23). The first four plaques are not close to the curb of the orchestra, but their spacing from it is so graduated as to follow the curve of the drain, which corresponds to the curve of the seats. Spaces are left between the plaques, so that the streams of water might easily pass down into the canal. The following measurements of the plaques



FIGURE 23.—VIEW OF EASTERN PART OF THE THEATRE AT OENIADAE, LOOKING FROM UPPER PART OF CAVEA.

and spaces will give an idea of the arrangement for one-half of the distance toward the other side of the orchestra. Beginning at the two steps, we have: stone, 0.81 m.; space, 0.245 m.; stone, 0.995 m.; space, 0.25 m.; stone, 1.02 m.; space, 0.30 m.; two stones, 1.35 m.; space, 0.28 m.; stone, 0.945 m.; space, 0.24 m.; two stones, 1.34 m.; space, 0.30 m.; stone, 0.91 m.; space, 0.24 m.; two stones, 1.42 m.; space, 0.30 m.; stone, 1.03 m.

The orchestra of the theatre has a radius of 7.65 m.; it is bounded by a curb formed of blocks of white limestone, which

are 0.46 m. in width, thus making the diameter of the orchestra 16.22 m., which is about the size of the orchestra of the theatre at Piraeus (16.34 m.). The orchestra is not paved, but seems to have been finished with a layer of fine, gravelly cement, which when packed down gave a hard surface flush with the top of the curb. The blocks of the curb have a total thickness of 0.46 m., and rest on the rock as a foundation; but only a height of 0.325 m. shows a finished surface above the level of the plaques over the drain. This outside face is finished with simple mouldings above and below, leaving a sunken surface of 0.19 m. between them. The stone which comes at the end of the two steps forming the descent to the drain is finished in this way only half its length, since the other half would be covered by the upper one of the two steps (cf. Fig. 19). This last block has an outside length of 1.10 m., but on the inside curve measures only 1.05 m. The other twelve blocks which were uncovered on the eastern side of the orchestra have an average length of 0.97 m. on the outside face and 0.925 m. on the inside. These blocks were fastened together by simple clamps, formed from an iron bar bent down to form a right angle at each end. The counter sinkings for the clamps are 0.22 m. in length. None of the iron or lead used in them now remains.

On the western side of the orchestra three additional blocks, comparatively thin, were found, which continued the circle from the two steps on toward the proscenium. These blocks were not clamped together, and are set flush with the surface of the ground on both their outer and inner faces. They are left rough on each of these sides, which shows that only the upper surface was intended to be seen. From these we may judge that originally the curbing completed the circle. The completed circle of the orchestra would be almost tangent to the proscenium, which was 8.47 m. from the centre of the orchestra. Undoubtedly the rest of the blocks have been removed for building purposes in later times, for they are of a size easily handled, and were never covered by a deep deposit

of earth; the flat blocks forming the foundation of the middle of the proscenium have disappeared in the same way.

The narrowest part of the parodoi which lead from the orchestra, *i.e.* the space between the end of the outer wall of the parascenium and the wall bounding the cavea, measures 2.65 m. The rock-cut wall of the eastern parodos makes an obtuse angle where the secondary supporting wall begins, and thence continues parallel to the side wall of the parascenium, at a distance of 9.11 m. from it, for a distance of about 20 m., when it joins the street at the back of the stage-building.

C. THE STAGE-BUILDING

The plan of the stage-building of the theatre is simple. The proscenium proper had a length of 16.45 m.; the two parascenia project 0.49 m. from the line of the proscenium, and each have a length of 5.06 m., thus giving a façade whose total length was 26.57 m. At the west the side wall of the parascenium is 5.55 m. in length; the wall then turns inward at a right angle for a distance of 2.74 m., and finally turns another angle and continues for 4.55 m. to the back wall of the stage-building. On the east the side wall of the parascenium measures 5.54 m.; the wall at right angles only 2.39 m., and from that to the back wall, 4.54 m. The back wall has a length of 21.90 m. and is 8.76 m. distant from the proscenium. The back wall with the side walls immediately adjoining it has a width of about 0.85 m., but the side walls of the parascenia are only about 0.45 m. in width. All these walls are in a much ruined condition, and are hardly more than remains of foundations.

The whole middle portion of the proscenium has disappeared, and between the projections for the parascenia only two or three blocks at either end are found *in situ*. These blocks are of white limestone, and vary in thickness from 0.20 m. to 0.30 m., and in width from 0.48 m. to 0.60 m. (cf. Fig. 24). Some scattered blocks, which undoubtedly belonged to the

proscenium, were found, but it was impossible to assign them to their places with certainty.

At a distance of 0.42 m. from the front edge of this foundation of the proscenium there extends a series of cuttings, each of which is 1.25 m. in length, and is cut back to the inner edge of the foundation at a depth of 0.023 m. below the smooth upper surface. The spaces between these cuttings measure



FIGURE 24.—THEATRE AT OENIADAE. REMAINS OF THE PROSCENIUM, LOOKING EAST FROM THE WESTERN PARASCENIUM.

0.25 m. From these measurements we may judge that in the length of the proscenium between the projections of the parascenia there were ten of these cuttings, and in the middle between each series of five was space for a doorway about 2 m. across; *i.e.* 17.55 m. (the total length of the foundation including the extensions behind the front of the parascenia)—
 $[(1.25 \text{ m.} \times 10 \text{ cuttings}) + (0.25 \text{ m.} \times 8 \text{ spaces}) + c. 0.62 \text{ m.}$
 (distance of extension beyond cutting on the east) + *c.* 0.43 m.
 (corresponding extension on the west)] = 2 m.

At the front of the parascenium on the east there are three of these cuttings, 1.25 m. in length, with spaces of 0.25 m. between them, but on the west parascenium we find an irregularity. Proceeding from the projection, we find two cuttings of the regular size and spacing, but after these there comes a space of 0.92 m. before the next cutting, which extends to the end of the foundation, and is not 1.25 m. in length. Moreover, in this case the stone is cut entirely away, and is not a mere sinking as in the other instances. I have found no explanation for this irregularity; possibly a blank wall filled out the space beyond the first two cuttings.

All these cuttings undoubtedly served as sockets into which the pinakes or sections of scenery were set between the columns of the proscenium, the whole forming a background for the orchestra. At the outer end of each cutting, according as the cutting is east or west of the central doorway, there is sunk a shallow hole about 0.055 m. in diameter;¹ these holes probably served in each case as a socket into which a bar might be set to hold the pinax in place. That the pinakes were stationary, and did not swing like doors or were not readily changeable, we may conclude from the fact that the first cutting in the east parascenium comes in front of an overlapping block of the proscenium proper for a distance of 0.21 m., and so forms a slot open at only one end (cf. Fig. 25).

Aside from the remains of the foundation, a number of other fragments were found from which it is possible partially to reconstruct the proscenium, and so gain some idea of its appearance. First among these are the fragments of the columns or pilasters which occupied the spaces between the pinakes. From the accompanying plan of a cross-section of one of the fragments (Fig. 26), it is seen that they were fashioned into a rectangular form at the back with a face of 0.25 m., the same measurement as the spaces left on the

¹ The hole in the cutting first to the west of the eastern parascenium projection seems to be lacking, or at least to be but slightly sunk. Probably the corner column was here reversed, so that no bar was necessary for fastening.

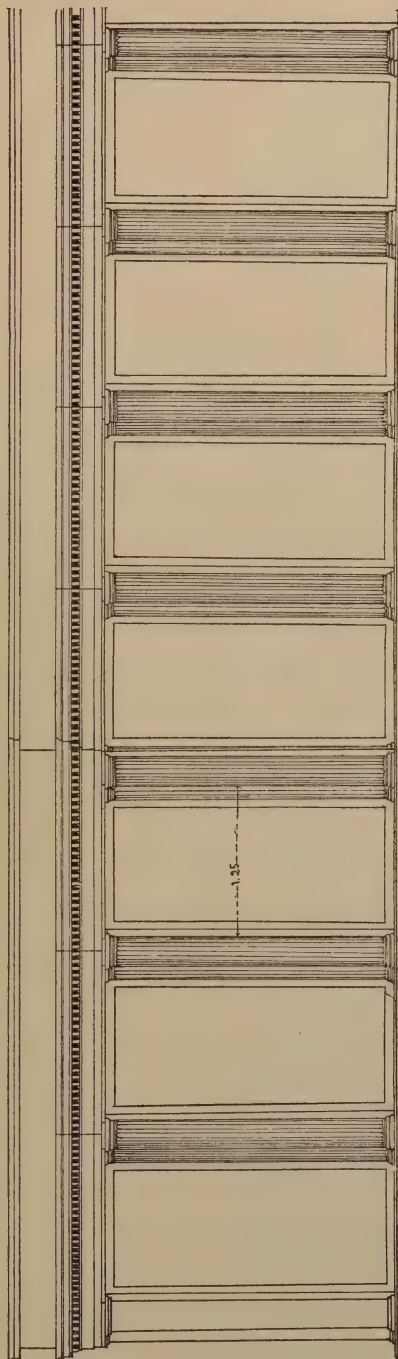
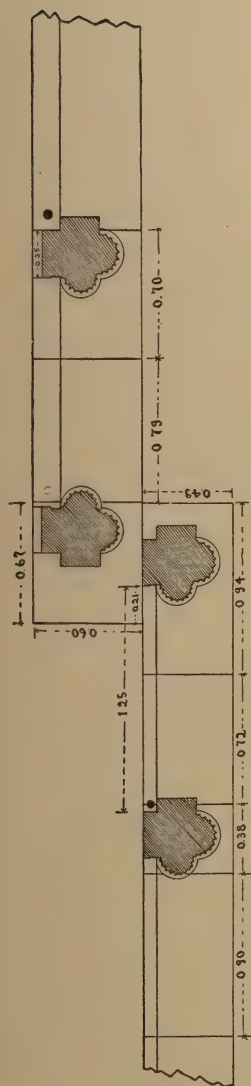


FIGURE 25. — THEATRE AT OENIADAE. RECONSTRUCTION OF FAÇADE AND DETAILS OF STYLOBATE AT EASTERN PARASCENIUM.

stylobate. This face projects 0.095 m. from the body of the column, and on one side, at a distance of 0.05 m. from the flat face, there occurs a slight inset, where one side of a pinax probably fitted. The face of the column opposite to the side with the inset is also cut into a rectangular shape, but projects

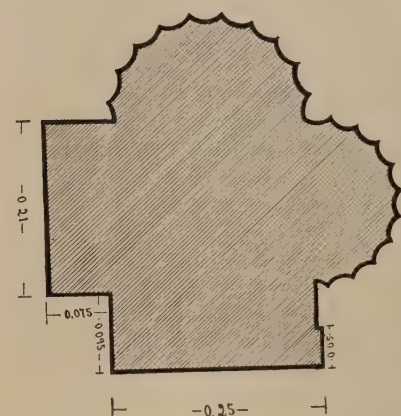


FIGURE 26.—CROSS-SECTION OF A COLUMN OF THE PROSCENIUM.

only 0.075 m. and has a width of 0.21 m. The other two faces are semi-circular and are fluted, their diameters corresponding to the measurements of the opposite faces; the total diameter of the column was about 0.43 m. The best preserved half column at the side shows ten flutings, *i.e.* $\frac{1}{2} + 9 + \frac{1}{2}$, but on all the fragments the outer face is so badly worn that its exact number of flutes

cannot be determined. Only one fragment was found which clearly exhibits the two rectangular faces, and it at first seemed probable that this might be a column intended for an inner corner, while the regular form of the columns of the proscenium would be that of a trefoil, or cluster of three half-columns, arranged against a rectangular pilaster. A careful examination of the other fragments, however, did not make this certain, for the soft sandstone of which they were composed was so eroded, and the faces were so mutilated, that nothing more than *one rectangular* face could be made out; the other faces may have been all semicircular, or the columns may have been finished as the one already described. If they were all of this unusual shape, which is the only certain shape found, it seems likely that the columns were so arranged on either side of the central doorway that the fluted faces would be turned toward the right on the

columns to the right of the doorway as one faced outward, and toward the left on the columns to the left of the doorway; they would thus face the audience in the corresponding half of the cavea. This position would bring the short face with the inset at the opposite end of the cutting for the pinax from that where we noticed the shallow hole, thus showing the means of fastening at each side of the pinax. One small fragment of a torus, belonging to a base or capital, was found. The phenomenon of half-columns fitted against pilasters is a comparatively late development in the proscenium of Greek theatres, and where grooves occur at the side for pinakes, as at Priene, New Pleuron, and Delos, it is dated by Puchstein in the third century B.C.¹

Several of the architrave blocks, Ionic in style, which surmounted the columns, were discovered in different parts of the theatre; they are broken in pieces and badly worn for the most part, but one lying in the orchestra is preserved for its total length of 1.53 m.² The broken fragments of the others show a complete length of about 1.50 m., which was the distance from centre to centre of the columns of the proscenium. As a whole, however, the best preserved piece of the entablature is a block found in the western parodos, the details of which are shown in Fig. 27. This block is broken at one end, so that its preserved length is only 1.40 m., but the break occurs where the stone was cut up to receive the capital of a column, and from the other end of the block we know that this cut extended 0.10 m. from the end, thus giving a total length of 1.50 m.

The total thickness of the architrave block is 0.41 m. and its depth on top is 0.58 m. Above the two plain bands at the lower part of the block is a well-preserved row of dentals, numbering twenty in the space of 1 m. and having a depth of

¹ Cf. O. Puchstein, *Die Griechische Bühne—eine Architektonische Untersuchung*, pp. 17 f.

² At the right end of this block there is preserved a piece of the iron clamp leaded into a socket; the clamp is of the same form as those used in the curb of the orchestra.

0.038 m. On the second band of this architrave seven letters are cut, 0.05 m. in height. Their straight strokes end in broadened apices, the O is much less in height than the other letters, the Σ has widely flaring upper and lower strokes, and the X is greater in width than in height, peculiarities of cutting from which we may date the inscription in the third century B.C. The letters form part of the words $[\tau\eta]\nu \acute{o}\rho\chi\eta\sigma\tau[\rho\alpha\nu]$, but what was done to the orchestra we do not know;

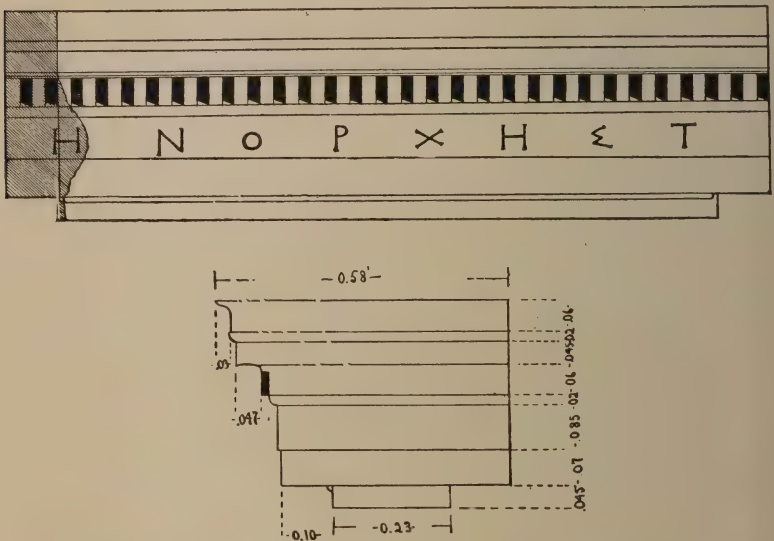


FIGURE 27. — DETAILS OF ARCHITRAVE BLOCK FOUND IN WESTERN PARODOS OF THE THEATRE AT OENIADAE.

possibly the name of the man who gave it or made it was cut on the preceding blocks. This block was probably the middle one of the three forming the front of the western parascenium, since it was fitted squarely to another block at each end.

In the eastern parodos was found another block on which the bands of ornament were continued around the end, showing that it was the first block on the east. It is broken in two pieces, but the total length is *c.* 1.60 m. The cutting to receive the capital at the ornamented end is 0.21 m. in length,

thus allowing the extra length for resting fully on the end pilaster. At a distance of 1.01 m. from the end of the second band were found the first two strokes of the letter N; beyond this point the surface of the stone is broken away, and it would be fruitless to conjecture the first word of the inscription. All the other fragments of the architrave are so worn that no letters appear; we therefore cannot tell whether the inscription appeared only in front of the parascenia or was continuous all across the proscenium.

At the back of the upper surfaces of the two blocks found in the parodoi there appear cuttings 0.16 m. in width and 0.16 m. in depth. These are roughly hewn out, and from their shape one might argue that the beams which rested in them were not horizontal, for in that case we should expect the bottom of the cutting to be level in order to give the beams a firm basis. Here, however, the bottom of the cutting has a rough slant, such as one would expect for sloping roof-beams; if the beams did slope, then there was no raised stage in this part of the theatre, on which actors might appear.

Back of the proscenium we find no second wall or stage wall proper, but enter at once into a large room, the roof of which was supported by columns, whose bases appear at a distance of 2.70 m. from the front of the proscenium. These bases are four in number; they are irregular blocks set in the ground and only agree in being 0.26 m. in thickness. Beginning at the outside wall of the western parascenium, the spacing from centre to centre of these bases is as follows: 6.75 m. + 3.95 m. + 4.30 m. + 4.08 m. + 6.70 m. to the east wall. The space between the two columns at either side was thus about 4 m., leaving a slightly larger space of 4.30 m. between the centre columns. The first base on the west is 0.80 m. $\times$ 0.66 m.; the next, 0.80 m. $\times$ 1.08 m.; the third, 0.72 m. $\times$ 0.84 m., and the eastern, 1.12 m. $\times$ 0.72 m. This last basis is squared on top into a slight elevation, which measures 0.53 m. $\times$ 0.46 m. It seems likely that the columns used were of stone, for a fragment of a smooth, round limestone column, 0.365 m. in diameter,

was found in the stage-building. This fragment still shows pieces of stucco adhering to its surface; it is 0.28 m. in height, and at the top swells into a slight capital.

The stage-building might be entered through a door in the back wall. This door was 10.30 m. from the eastern end of the back wall and had a width of 1.65 m. As the back wall has a total length of 21.90 m., this door is not in the middle of it, but lies 0.35 m. nearer to the west end. Nevertheless, the doorway came midway in the length of the proscenium, and so was immediately behind the central door in the façade. The difference of 0.35 m. is adjusted by the same difference in the lengths of the two walls, which bound the parascenia at the back; the wall at the west measures 2.74 m. in length, while that on the east is only 2.39 m. (Cf. p. 190.) Why these irregularities in the parascenia should appear is not clear; it remains to examine these chambers more closely.

The walls which separate the two parascenia or side chambers from the main room of the stage-building are in a most ruinous condition, but it may be seen that they started from the inner angle in the side wall and extended forward toward the stylobate in front. The chamber on the east is, therefore, somewhat smaller than that on the west, for these walls do not correspond to the projections in the stylobate of the proscenium, but they meet the stylobate about midway between the projection and either end. In their present ruined condition some blocks continue the line of these walls across the stylobate, but, although the blocks are quite regularly placed, it is evident for several reasons that they could not have been in this position originally. First, because on the western side the line crosses the stylobate where there was once a column; this would make the wall a later addition at least. Secondly, if the wall was built later across the stylobate, we would not expect a column or architrave to be in use; but we have found an architrave block lying in the western parodos, one end of which would rest on the column at this point, since it is not an end block. The architrave block found in the eastern parodos

could be used only at the end, and the cross wall comes out between the next two columns, so that it would break the line of the façade. Finally, since the walls could not have been built across the stylobate and the architrave blocks have remained in position at the same time, then these walls were never extended across the stylobate, for we know that the architrave blocks remained in position until the theatre finally fell into ruin and its use was discontinued, or we should not find these stones blocking up the parodoi. If they had been removed before to make room for the walls, they would have been taken away from the theatre entirely.

These walls, then, originally extended only to the stylobate, the fronts of the parascenia being shut off with columns and pinakes. This argument is given only because the blocks have fallen in such regular position across the stylobate.

It seems likely that these side rooms were entered from the main hall through doors. The utterly ruined condition of the walls makes their position uncertain, but they seem to have been 1.41 m. in width and 1.36 m. from the stylobate. These measurements are the same both at the east side and at the west, and are reasonably sure, because the spaces indicated as doorways are filled with comparatively small fragments which could not have served as foundation blocks, while the rest of the walls are of larger, squared stones.

Why these rooms were of different sizes, and why they did not equal in breadth the projections from the main line of the proscaenium, are questions that cannot be answered.

In the ruins of the stage-building were found four curiously worked stones; two of them seem to show curves cut at each end, while the other two show curves at one end only (cf. Fig. 28). These stones are of the customary size of building blocks used in the walls, but their position is doubtful. Possibly they were used to make an arch for the doorways into the side chambers, thus imitating the pseudo-arch noticed in the city walls in Gate 10, but this explanation does not hold for the blocks that show curves at both ends.

The back wall of the stage-building does not run parallel with the roadway which passes to the rear of the theatre; its angle may be judged from the fact that the east end of the back

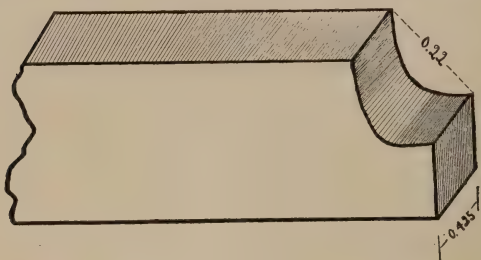


FIGURE 28.—BLOCK WITH CURVE, FOUND IN STAGE-BUILDING.

wall is 9.85 m. from the roadway, while the west end is *c.* 12 m. distant.

At a distance of 10.25 m. from the west end of the back wall are the remains of a rectangular foundation which served probably as the pedestal for a statue, or something of that nature. This foundation is 1.40 m. in width, and projects 2.70 m. toward the roadway. No other remains were discovered which could have been connected with the theatre.

The results of the excavation show that the construction of



FIGURE 29.—VIEW OF EXCAVATED PORTION OF CAVEA OF THE THEATRE AT OENIADAE, FROM THE WEST.

the theatre of Oeniadae was confined to one period; no reconstructions are anywhere evident. We may place the period of construction in the third century B.C., from the evidence of the inscriptions on the seats, the forms of the clamps, the form of the columns of the proscenium, and the inscription on the architrave block.

As regards the question of a raised stage, we have no evidence to show that such ever existed; no ramps, no stairways, and nothing else remains which might serve as an ascent to it. The lower seats near the parodoi are made to command a view of the orchestra; they would afford no view of actors on a platform above the pillars of the proscenium. Inasmuch as Acarnania and Aetolia were always regarded as somewhat behind the rest of Greece in the arts of civilization, we might expect a theatre in this region to be near the primitive form of such buildings.

BENJAMIN POWELL.

OENIADAE

III

THE SMALL TEMPLE

ON a promontory at the west side of the harbor, where a level space is formed at an angle in the city wall, there appeared remains of what had evidently been a temple of small dimensions. The angle in the wall is formed where the city wall begins on the west side of the harbor and where is located the small gate, No. 1, already described. This gateway gave access to the west end of the platform where the temple was built. As there was no deposit of earth over the remains, it was a question of only a few hours' work, on December 24, 1900, to clear away the small accumulation and make clear the lines of the temple.

The temple seems to have consisted of a pronaos, cella, and small opisthodomos; it had no peristyle and probably no columns at either end. Its total length is about 11.50 m. and its breadth, 6.19 m.; the walls are, in general, about 0.50 m. in thickness and are composed of blocks of gray limestone. The temple is quite accurately orientated, the axis inclining slightly south of east. (Cf. Fig. 30.)

In the middle of the eastern end is a doorway, 1.42 m. in width, through which the pronaos is entered. (Cf. Fig. 31.) The pronaos is about 2.17 m. in depth on the inside and 5.15 m. in width; the wall bounding it on the north has fallen outward from its place.

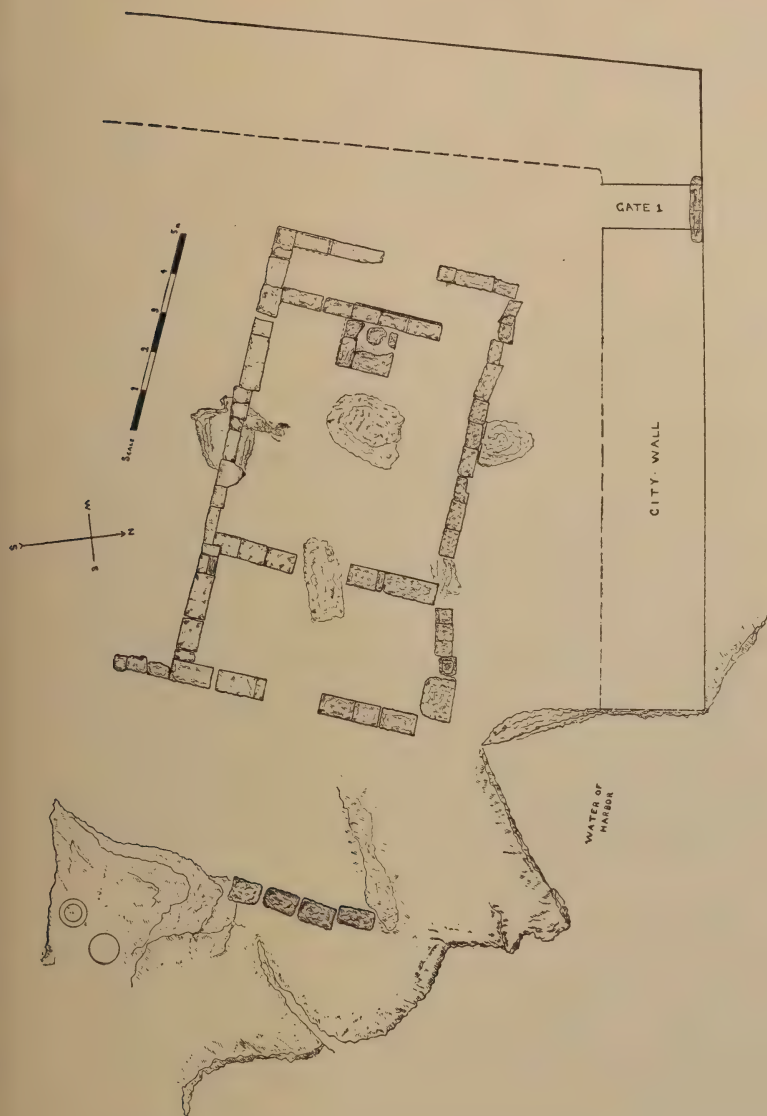


FIGURE 30.—PLAN OF THE SMALL TEMPLE AT OENIADAE.

The doorway from the pronaos into the cella is 1.35 m. in width; the natural rock crops out at this point, and is also to be seen in the middle and on the north and south

sides of the cella, which has a length of 6.04 m. and a width of 5.15 m.

Against the rear wall of the cella were found the remains of a basis, probably for the cult statue. When uncovered this basis had preserved its shape quite well, but as it was constructed of small blocks, it was subsequently pulled to pieces by peasants in the probable expectation of finding concealed



FIGURE 31.—THE SMALL TEMPLE AT OENIADAE, LOOKING FROM THE EAST.

treasure; this occurred before our return to Oeniadae in the following May. The foundation of the basis measured about 1.20 m. from front to rear and 1.32 m. in width. This basis was not built midway of the back wall of the cella, but was placed about 0.50 m. to the south of the middle point, thus bringing it out of line with the doors of the pronaos and cella. It was probably so placed that abundant room might be left for the doorway into the small rear chamber, which was made at the northern end of the cross wall, *i.e.* to the right of the statue basis, and which had a width of 1.15 m.

The rear chamber has a depth of only 1.07 m., and a door, 1.40 m. in width, opens toward the west, corresponding to the doorway at the opposite end of the temple. The western door gives easy access to Gate 2.

A considerable quantity of broken tiles was found in the interior of the temple, none of them with stamps, however. Some small fragments of marble were found in the cella, coarsely crystalline in structure and covered with a yellowish brown patina. One of the fragments forms part of the right foot of a statue (cf. Fig. 32); the toes appear peeping out from the folds of drapery which nearly cover the foot. The marble is somewhat worn, especially about the great toe. The second toe, which is the longest, is 0.036 m. in length, and the foot across the toes has a width of 0.073 m.; the sandal underneath conforms to the shape of the foot. We may infer from this small fragment that the statue was a draped female figure about three-fourths life size. Aside from this fragment we have no reason for assigning a name to the temple. If a female divinity were worshipped here, we might, from the proximity of the harbor, conjecture her to have been Athena the Saviour, who was worshipped as goddess of the sailors at Piraeus, in conjunction with Zeus Soter.¹ The water of the harbor came very close to the temple at the north-east corner, where the rock falls sheer.



FIGURE 32.—FRAGMENT OF A MARBLE FOOT, FOUND IN THE SMALL TEMPLE.

Immediately to the east of the temple, between two outcroppings of the natural rock, are four large building-blocks laid in a row; their purpose is not evident. In the rock immediately to the south of these are two circular depressions, artificially cut; one circle is entirely hollowed out, while the

¹ *Ἀθηνᾶ Σώτρεα*, cf. *C. I. A.* II, 305, 325, 326, 469, 1387; III, 281. Cf. Strabo, 395, 396, and Paus. I, 1, 3. Artemis also had this cult title. Cf. *Ἐφ. Ἀρχ.* 1893, p. 59; also pp. 52–54, and 1883, p. 205, no. 5, *Σώτρεα* inscribed on a terracotta statuette of Artemis, holding a hare and caressing a fawn.

other forms merely a ring.¹ They are about 0.70 m. in diameter, and may have served as sockets for some monuments in front of the temple.

The only other trace of artificial working in the vicinity is down by the water's edge, at a distance too far toward the east to be included on the plan, Fig. 30. This is a basis squared from the natural rock; nothing remains from which one might determine what it supported. It probably had no connection with the temple.

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¹ Cups and circles cut in the rock are common among primitive peoples in various parts of the world, especially in central Australia, where the churinga, as a stone so marked is called, has a symbolical and religious meaning. For a discussion of these, cf. Andrew Lang, *Magic and Religion*; 'Cup and Ring': *an Old Problem Solved*, pp. 241-256. Mr. Lang gives no instances from Greece.

OENIADAE

IV

THE BUILDING ON THE HILL

WITHIN the circuit of the walls of Oeniadae, on a hilltop a short distance from the acropolis, remains of walls were observed protruding above the ground. As this place had already been examined by Heuzey,¹ who thought it might be the site of a temple, excavations were undertaken in December, 1900, and continued for five days. It was soon discovered that from its form the building could not have been a temple. The building is situated on the crest of the hill, which descends most precipitously on its western side, and here was required the retaining wall noticed by Heuzey, which is not constructed of Hellenic masonry, but is, on the contrary, polygonal in style.

The form and construction of the building may best be seen by a reference to the plan (Fig. 33), and only a few words are needed in explanation. Toward the east are two long walls running from north to south. The space between these walls, A, was probably never covered in, but was merely a terrace or approach on the gentle slope toward the east. The inner wall is interrupted midway by an outcropping of rock, which projects into the space A. In this rock is a narrow cutting which may have served as a support for an inscribed stelé.

¹ Cf. Heuzey, *L'Acarmanie*, p. 445: "Dans la partie haute de la ville, sur une crête isolée, je remarquai un mur de soutènement, formé encore de quatre ou cinq assises helléniques (?), qui marque peut-être la place de quelque temple."

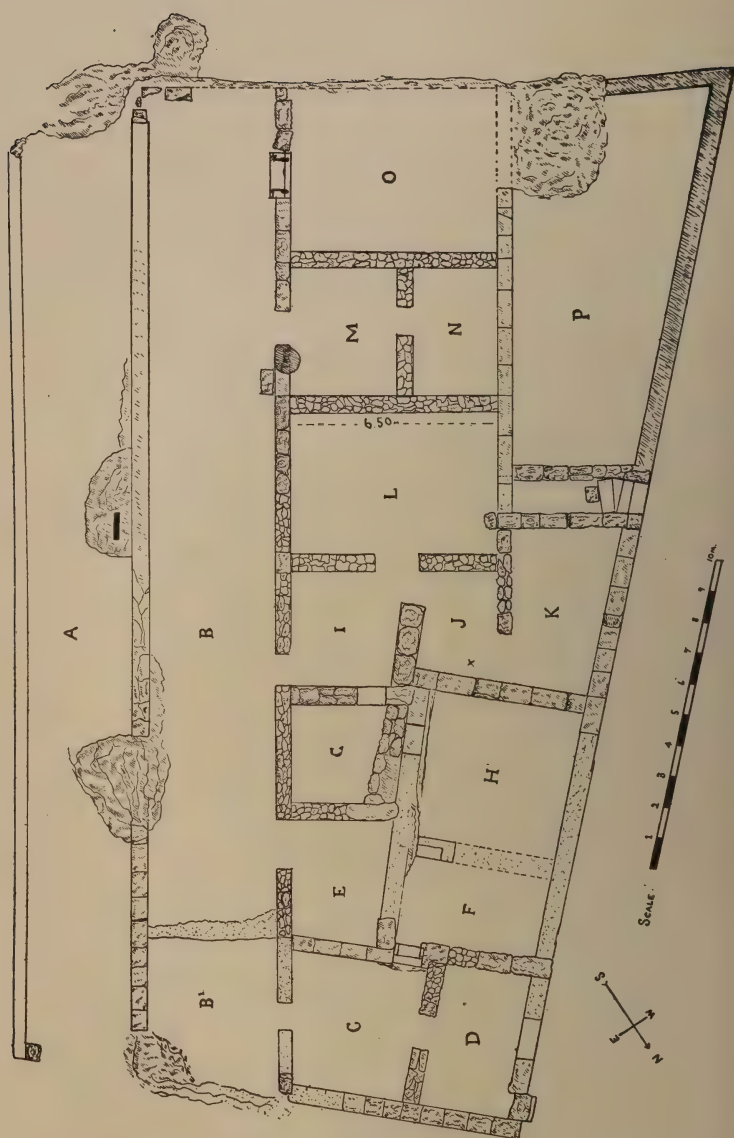


FIGURE 33. — PLAN OF THE BUILDING ON THE HILL AT OENIADAE.

The long enclosure, B, inside the second wall seems to have been a porch running the entire length of the building, *c.* 32 m. ;

the northern end, B¹, is at a somewhat lower level. From this porch there opens a complexus of rooms, no less than thirteen in number.

Beginning at the north, B¹, we find a doorway which opens into a series of four rooms, C, D, F, and H. The outside walls of these rooms are composed of large blocks of stone, which rest on the levelled rock; in places where the walls are entirely destroyed, as on the eastern sides of F and H, we see only the



FIGURE 34.—THE BUILDING ON THE HILL, LOOKING SOUTHWEST FROM ROOM C.

cuttings made in the rock to receive the masonry. The floors of these rooms are cut from the rock, but seem, from traces discovered, to have been covered with a layer of cement originally. Traces of ashes were also observed in the earth removed from these rooms, and the effect of fires was noticed on the rock beneath. Of these four rooms, only C opens directly on the corridor; D is entered from C through a doorway toward the west, and F is also entered from C through a doorway in the southwest corner. The threshold of this last doorway is still

in place (cf. Fig. 34), and shows that the door was about 0.70 m. in width. Room H must have been entered from F, but the dividing wall with the doorway has been totally destroyed, and only its bedding remains cut in the rock, with one stone in place at the east end. The rooms in this part of the building are seen to be of an irregular shape, which is due to the fact that the wall on the west is not parallel with those on the east, but runs slantingly, so that, while the outside walls



FIGURE 35. — POLYGONAL RETAINING WALL WEST OF THE BUILDING ON THE HILL.

of the building proper at the north are only 6.80 m. apart, the corresponding walls at the southern end of the building are about 13 m. apart.

Proceeding south along the corridor from C, we next find a doorway leading into a single room, E; the floors of this and the following rooms, which are all on a higher level than those already described, were not cut out of the rock, but were formed of earth. The walls of small stones which bound these rooms were also laid on the earth.

The next doorway opening from the corridor leads to a series of rooms. The room G, although adjoining the corridor, has no entrance directly from it, but was entered from I, the first room of the series. Room L was entered from I through a doorway on the opposite (south) side from G. This room, L, is about 4.50 m. in depth and 6.50 m. in width, and is rectangular in shape, for we find here a wall on the west parallel with the corridor; it was probably entered also from the west,



FIGURE 36. — THE BUILDING ON THE HILL, LOOKING NORTHEAST FROM ROOM O.

for at this point a stairway leads up through the polygonal retaining wall (cf. Fig. 35). Of this stairway, which is about 1 m. in width, there are four steps remaining. Toward the west an irregularly shaped room, J, also opens off room I, and another room, K, lies in turn to the west of this.

The next doorway from the corridor B admits us to two rooms, M and N, placed one behind the other; a large tree, which has grown up at one side of this doorway, has destroyed the wall at this point. The walls here are composed of small

stones which were built into a heterogeneous mass without being fitted to one another (cf. Fig. 36).

The last room, O, toward the south is entered through a door from the corridor, the threshold of which door is still in place and shows the slots used for fastening it. The stone is 1.25 m. in length and 0.60 m. in width. On the west side of this room a large mass of rock crops out, and none of the wall of masonry remains either here or at the southern side.

The enclosure P was not a room, but formed a terrace to which access was given by the small staircase already mentioned. The wall of polygonal masonry, which is preserved to a height of four courses, bounds the enclosure on the west, and, turning an acute angle at the southwest corner, it extends to the mass of rock which forms the western side of room O. The whole platform, P, is on a lower level than the rooms immediately to the east of it.

Throughout the excavation a few small objects in iron, bronze, and clay were discovered, of which I subjoin a list.

In different parts of the building, ten iron nails were found, three of which are mere fragments. These nails have large flat heads, 0.03 m. in diameter and vary in length from 0.11 m. to 0.15 m. Five are bent so as to form right angles at a distance of 0.055 m. from the heads; it is evident that these were driven through some substance and then clinched to hold more firmly, probably in the construction of wooden doors. Also of iron are three spear-heads, one of which is very badly corroded. Of the three the longest is 0.112 m., and the shortest 0.08 m.; Fig. 37 gives their shapes and relative sizes.

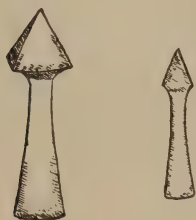


FIGURE 37.—SPEAR-HEADS
FOUND IN THE BUILDING
ON THE HILL.

In bronze there was found a Megarian coin near the surface of the ground at the northern end of the long corridor, B; it dates from the third century B.C. (For the type, cf. *Brit. Mus. Cat.*, Attica, etc., p. 120; Megara, no. 21.) Other

objects in bronze are one nail, 0.072 m. in length; a small, thin box with a ring in the lid; a small handle, 0.03 m. across the top and 0.02 m. in height, which was evidently fastened on the outside and did not form a part of the body of any vessel (Fig. 40); and lastly a piece of bronze ornament whose use is not clear.



FIGURE 38.—BRONZE ORNAMENT FOUND IN THE BUILDING ON THE HILL.

This consists of six beads, which are separated from each other by two disks between each pair; from the last bead extends a tapering point, which probably occurred also at the other end of the series when that was complete. A pin runs through the fifth bead to serve as a fastening against some surface, to fit which the beads are slightly flattened at the back. The total length of the piece, which is slightly curved, is 0.105 m. (cf. Fig. 38).

Two stamped tiles were found at the northern end of corridor B, one showing the letter A and the other Δ, each 0.0365 m. in height (cf. Fig. 39). A quantity of small fragments of pottery were collected, most of them from room J at the point indicated by *x* on the plan. These fragments are mostly unglazed and are of a common yellow or red clay; a very few show a thin black slip or glaze. As far as can be

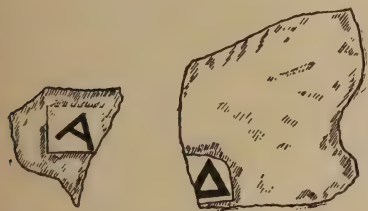


FIGURE 39.—STAMPED TILES FOUND IN THE BUILDING ON THE HILL.

judged from the shapes of the fragments, they all belonged to household utensils, such as water jugs, wine jars, flat plates, and round bowls. Some of the pieces have a sooty, charred appearance, evidently from use over an open fire in cooking.

Handles are shown in variety;

one peculiar kind is worthy of mention, having the shape of a pair of ears or the raised wings of a butterfly (cf. Fig. 40). These are formed from one strip of clay, and are well suited for raising a hot vessel with the thumb and finger. Among



FIGURE 40. — BRONZE HANDLE
AND CLAY HANDLES FOUND
IN THE BUILDING ON THE
HILL.

the fragments of vases was found a small terra-cotta mask representing the sun-god, Helios (cf. Fig. 41). The material is a light yellow clay, and the total height, 0.09 m. The style and expression are rather severe, as is shown in the flat modelling of the eyes, the straight lines of the mouth, and the roll of hair which passes in a curved line across the forehead, and is divided vertically into small sections. The crown of streaming rays, which surmounted the head, is so broken that only two rays appear on one side and the stump of one on the other.¹ The head-dress is represented as falling down behind the head and neck, but as the head is merely a mask, parts of it are seen only at each side of the neck.

We can give no name to this building on the hilltop more than to say that it seems to have been a dwelling-house. From its position and extent, we may conclude that its inmates were individuals of prominence, probably government officials. The upper

walls of the house were probably made of bricks, for fragments of these were found and one whole one which measured



FIGURE 41. — TERRA-COTTA MASK OF
HELIOS FROM THE BUILDING ON THE
HILL.

¹ Mr. Robert Brown, Jr., in *Semitic Influence in Greek Mythology*, p. 116, says: "*Qarnâim*, as the name of a horned divinity, reappears in the name and cult of the rayed (= horned) Sun-god Apollôn Karnaïos, so ancient and famous among the Dorians; and which, as Otfried Müller has shown, 'was derived from Thebes' (*Doric Race*, I, 373). One idle story said that this worship was established by an imaginary Karnos, an Akarnanian." The "idle" story

about 0.15 m. $\times$ 0.125 m. $\times$ 0.05 m. They were burned a dark red, but were easily friable. The roof was covered with tiles, as is shown by the many fragments of these found throughout the building.

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may mean that this worship of Apollo was local or preëminent in Acarnania (cf. Paus. III, 13, 3). The crown of rays of the Sun is prominent in literature as well as art. He transfers the crown to his son Phaëthon when the latter assumes the control of the chariot (cf. Ovid, *Metamorph.* II, 124, *Imposuitque comae radios*).

American School
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OENIADAE

V

A GREEK BATH

DURING the course of the excavations at Oeniadae in December, 1900, an opportunity was afforded for an examination of such remains of the city as still appear above ground. This resulted in the discovery, among the bushes at the southern extremity of the eastern fork of the harbor, of what appeared to be a portion of a small, circular building. Since this was the lowest part of the city, and the depth of earth appeared greater than elsewhere, we hoped to find the remains in a well-preserved condition, and work was therefore at once begun at this point. Owing, however, to the boggy condition of the soil, caused by its close proximity to the marsh, in which there is always more or less water, and to the heavy rains which soon set in, we were forced to discontinue our work for the winter, having merely discovered the circuit of the wall and a number of wedge-shaped blocks of white limestone, scattered haphazard in the enclosure.

With the resumption of the excavations in May, 1901, work was immediately begun on this building, which had become comparatively dry during the spring, and in a few days we stood upon what had once been the floor of a circular room. This had been composed of the scattered limestone blocks just referred to, but later had become badly broken and disarranged. In addition, while digging a trench around the outside, we dis-

covered that this was not, as we had at first supposed, a separate building, but that it was merely one of a series of connected rooms, all of which were probably used for bathing purposes, as the description will show. Unfortunately, even in May, the influx of water greatly hindered the work, so that

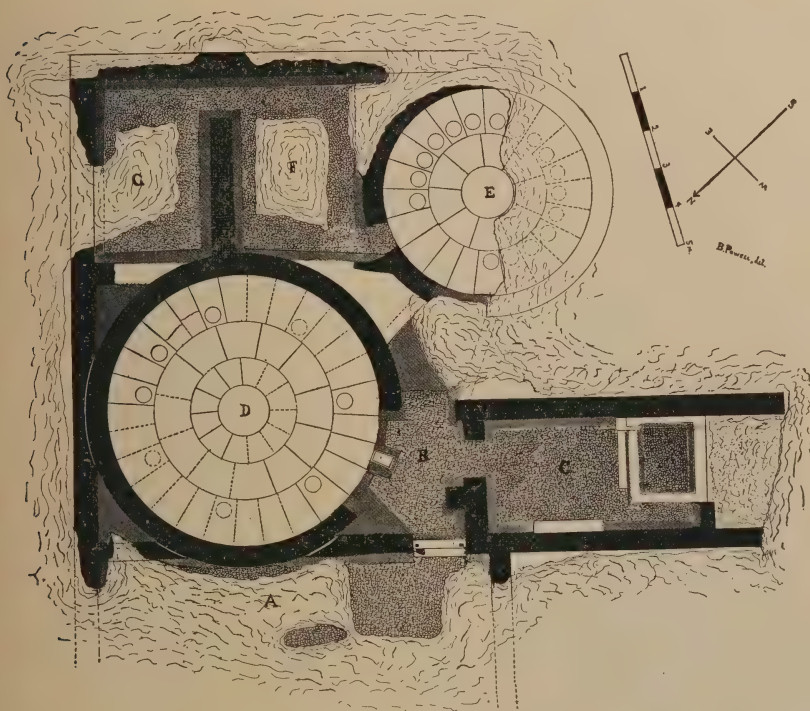


FIGURE 42.—PLAN OF GREEK BATH AT OENIADAE.

the excavations were not as thorough as would have been the case had the conditions been more favorable. Enough earth and mud, however, were removed to permit the drawing of what, it is hoped, will be an intelligible plan (Fig. 42). Whether this bath-house was connected with another building or was a complete structure in itself must be left in doubt until further excavations are made toward the north, during some exceptionally dry season.

As may be seen from the plan, the entrance to the baths was through room A, but whether this room ended the building in this direction cannot at present be determined. As this room is lower than any of the others,¹ and likewise nearer to the marsh, we were able to tap the mud in only a few places, which were almost immediately filled again with water. It was possible, however, to ascertain the width of the room (9.20 m.), and also the construction of its walls and pavement. The walls were constructed of large but rather roughly hewn blocks of hard, gray, native limestone, and were 0.54 m. thick. The inner face of the wall was left very rough, and to this a coating of coarse plaster, several centimetres thick, was applied. Close along the base of the walls ran a band of hard, gray cement pavement about 0.25 m. in breadth; while the large central space was covered with a carefully smoothed and polished mosaic pavement, composed of irregularly shaped bits of white limestone laid in cement. Fortunately this pavement, here as well as in rooms B, C, F, and G, is almost perfectly preserved, and although it shows no pattern, it is a splendid specimen of Acarnanian workmanship. Of the use of room A one can, of course, not be certain, the arrangements to the north being unknown, but it probably was the apodyterium, or disrobing room, which was usually included in the bath-house.²

From the southwest corner of room A one passed through an opening 1.32 m. wide, which, from the holes in the limestone threshold, we may assume to have once been closed by a wooden door, into what seems to have been the bath proper. The first step of this threshold is 0.06 m. above the floor of room A, and the second step is 0.04 m. above the first; the height of the second step above the floor of room B is 0.03 m. One entered a small, irregularly shaped hallway, or anteroom (B on plan), from which three other doorways opened out into the various divisions of the bathing establishment. Like A, B was paved with mosaic in the middle, with a border of cement close to the walls.

¹ 0.07 m. below floor of hallway, B on plan.

² Lucian, *Hipp.* 8.

Passing through this hallway, one proceeded through a doorway on the right, only 0.92 m. in width, into room C, which is about 5.35 m. long and 2.85 m. in width, and is paved with mosaic, as were the preceding chambers. At the farther end of this room and opposite the doorway was a *πύελος*, or bath-tub,¹ whose south and west walls were built up against the



FIGURE 43.—BATH AT OENIADAE. FRIGIDARIUM FROM SOUTHWEST.

walls of the room itself. This tub, a good idea of which is given by Fig. 43, was formed by constructing four low walls, which served as the sides of the tub, on the mosaic floor of the room. The sides which project into the room taper up slightly from a base 0.42 m. in thickness, and are rounded on top. They are composed of a core of tiles laid in cement, all of which is covered with a fine stucco. The four sides enclose a

¹ I believe this to be the only existing specimen of the *πύελος*, which is mentioned by *Schol. Aristoph. Equit.* 1060; *Poll. VII*, 166-168; *Diog. Laert. X*, 15.

space about 0.70 m. in depth, which enlarges from 1.135 m. by 1.61 m. at the bottom to 1.30 m. by 1.97 m. at the top. The bottom of the tub, as may be seen from Fig. 43, was formed by the mosaic flooring of the room. In this tub there were originally only two openings, one in the southwest corner, about 0.08 m. square and about 0.50 m. above the floor; while on the north there was another level with the floor. The former probably admitted the water to the tub, the latter allowed it to escape. The floor of the tub sloped from south to north, the outflow of the water being thus facilitated. In later times, the eastern wall was also pierced close to the wall of the room, and another outlet made there about 0.20 m. above the bottom of the tub. In addition to the *πύελος*, the room contained little except a seat, or step, along the eastern end of the tub, about 0.22 m. high; this was covered with stucco. Along the northern wall of the room was another step, 0.28 m. high and 1.75 m. long, which could have been used only as a seat for the bathers (Fig. 44). This room with the large tub was probably the frigidarium, since the arrangements indicate nothing as to heating; the tub was probably used as a cold plunge.

According to Vitruvius,¹ the water from the frigidarium should flow into the tepidarium, and, if we may assume this to have been the case here, we have a tepidarium in room D, for the waste water from the *πύελος* flows down the inclined floor of C² and across the hallway into it. This room (D), which was the first excavated, was, as I have said, circular, and paved with slabs of white limestone; its diameter is 6.80 m. These slabs, which are wedge-shaped, were arranged in concentric bands about a central circular slab. The central slab is here lacking, but undoubtedly was similar to the one found in E, and on it probably rested a brazier with a *χάλκωμα* (or large

¹ Cf. Vitruv. *De Arch.* V, 10. Vitruvius probably means that the water should go through pipes, and it is difficult to reconcile the arrangement at Oeniadae with his description, for no means of heating water, or drains for waste water, were discovered.

² This floor has a fall of 0.05 m. from the tub to the door.

kettle full of boiling water covered with a $\pi\hat{\omega}\mu\alpha$), by which chambers of this kind were heated.¹ Around this slab were arranged eight basins, cut in the slabs forming the floor, 0.37 m. in diameter and 0.215 m. deep, at a distance 0.80 m. away from the wall. The arrangement of the basins and of the blocks in which they were cut can best be seen on the plan. The blocks nearest the walls were 1.19 m. long, those



FIGURE 44.—BATH AT OENIADAE. FRIGIDARIUM FROM NORTHEAST, LOOKING THROUGH DOORWAY OF TEPIDARIUM.

next were 0.87 m., while the third or innermost were 0.68 m. All the plaques varied between 0.22 m. and 0.26 m. in thickness, and were so arranged as to incline very gently (0.015 m. in all) toward the centre. The walls of this room, like those of others, were 0.54 m. thick, but were made of soft, not hard, limestone, probably so as to better retain the heat. Furthermore, they were carefully joined together, and the stucco used

¹ Plutarch, *Demetrius*, 24, 3.

was of a much better quality than that used in room A, although not as fine as that in the *πύλος*. As may be seen from the photograph (Fig. 45), the walls still stand a metre or more in height, and are by far the best preserved in the entire structure. The view is taken through the doorway, 2.61 m. in width, in the foreground of which appear the remains of a



FIGURE 45.—BATH AT OENIADAE. TEPIDARIUM FROM SOUTHWEST.

limestone doorpost almost in the centre of the opening, probably used to support two swinging doors for those entering and leaving the room.

Returning from room D into the hallway, one passed up a short inclined passage, floored with cement, into another circular chamber (E). While it generally resembles the tepidarium, it is only 5.23 m. in diameter; likewise the doorway is only 1.28 m. in width. The pavement, however, corresponds almost exactly, except that here there are only two rows of slabs. The cups in the floor were slightly smaller, 0.34 m. in diameter and 0.14 m. deep, and, where in the other room some

slabs were left uncut, here, so far as uncovered, every plaque in the central row had a basin with the exception of those close to the doorways. We may, I think, assume that there were seventeen here as compared with eight in the other room, these being 0.83 m. away from the wall and 0.10 m. apart. Whatever these basins were originally intended for, their use seems to have been changed at some later date, for when uncovered each was found with a closely fitting circular tile so set in as to be flush with the floor. We removed one tile and found bits of tile and cement completely filling the receptacle. Otherwise the construction is the same as in D, the walls being of soft stone, 0.54 m. thick, and covered with the same kind of stucco.

What these cups were originally intended for is not known. No reference is made to anything of the kind in any of the ancient writers, nor are any others extant with the exception of some at Eretria,¹ the purpose of which is, I believe, equally unknown. The most probable use seems to me to be that, taken in conjunction with the rooms in which they are situated, they formed part of the heating apparatus. The baths, where pipes were not used, were usually heated by a brazier, above which was a cauldron of hot water. Why could not these basins have been filled with hot water from the cauldron so as better to diffuse the heat? In room D we have a large room and eight basins; in room E, although the room is smaller, we have seventeen basins. As I have before said, the walls are of soft stone, evidently in order to retain the heat better, and assuming D to be the tepidarium, E, being smaller, would naturally be more easily heated, and if the basins in the floor were used for heating, this could be accomplished much more easily.

¹ While in Eretria in the fall of 1900, I examined some baths of the Roman period, then newly excavated by Dr. Kourouniotes of the Greek Archaeological Society. The chambers there were circular, and similar basins existed, except that they were arranged in front of fixed seats. I believe they are as yet unpublished. There is a brief mention of these baths at Eretria in the *Am. J. Arch.*, Second Series, vol. V, 1901, p. 96.

Assuming these rooms to be the tepidarium and caldarium, the two smaller rooms, F and G, to which another narrow doorway from E gave access, must be the *ἐλαιοθέσια*, or anointing rooms, which are described as the necessary adjuncts of a bath.¹ A detailed description of these rooms is unnecessary, as their construction was the same as that of the other rooms, with mosaic floors. They, however, possess one remarkable feature, namely, the floors incline toward the north and the cement border there is slightly depressed, possibly to form a kind of gutter into which the oil and dirt could be the more easily swept, owing to the incline.

As to the upper structure of these rooms, no traces remain. The circular rooms, however, were possibly like those described by Vitruvius,² which for purposes of ventilation had at the apex of the conical or dome-shaped roofs a circular hole that could be opened or closed by means of an *ὀμφαλός*; this could be drawn up or down, according to the temperature desired. True, he speaks of Roman baths, but this seems also to have been the common method in Greek times.³

At what period these baths were constructed is difficult to say, as we know so little about the construction of Greek baths, and nothing at all about building methods in Acarnania and Aetolia. That the baths were built under Roman influence I can scarcely believe, first, because they are unlike the usual Roman bath, both in arrangement and manner of heating, and secondly, because their construction seems rather Greek than Roman. Herodotus says that hot baths were used in his time, and mention is frequently made of them in later literature.⁴ The coarse plaster affixed to the rough walls is not necessarily Roman, for we have the same in the ship-sheds at Oeniadae, and they were unquestionably constructed in Greek times. Also, unlike the mosaic in the baths which I have mentioned at

¹ Vitruv. V, 11, 2.

² Vitruv. V, 10, 5.

³ Cf. Timarchus in Athen. XI, 501; also Eratosthenes (*ibid.*) says: *τῶν γὰρ φιαλῶν οἱ ὀμφαλοὶ καὶ τῶν βαλανείων οἱ θόλοι παρόμοιοι.*

⁴ Herodotus, IV, 75; also Aristotle, *Probl.* II, 29-32.

Eretria, which was unmistakably Roman, the mosaic here is not at all unlike the mosaic found in the baths of the Greek gymnasium at Eretria.¹

The various small objects found in the various rooms in no wise tend to disprove the Greek origin of this bath-house, but,



FIGURE 46. — SPEAR-HEAD FROM THE BATH AT OENIADAE.

on the other hand, tend to affirm it. The iron spear-head, shown in Fig. 46, was found in E, and is 0.226 m. long, but gives no clew as to the date of its manufacture. Likewise, it is impossible to judge from the fragment of an arm of natural size, broken just above the elbow and at the wrist; the material of this is a very coarse-grained marble. The two fragments

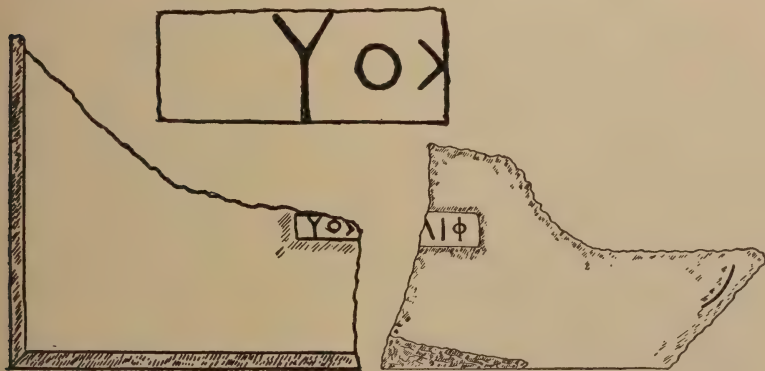


FIGURE 47. — STAMPED TILES FOUND IN THE BATH-HOUSE.

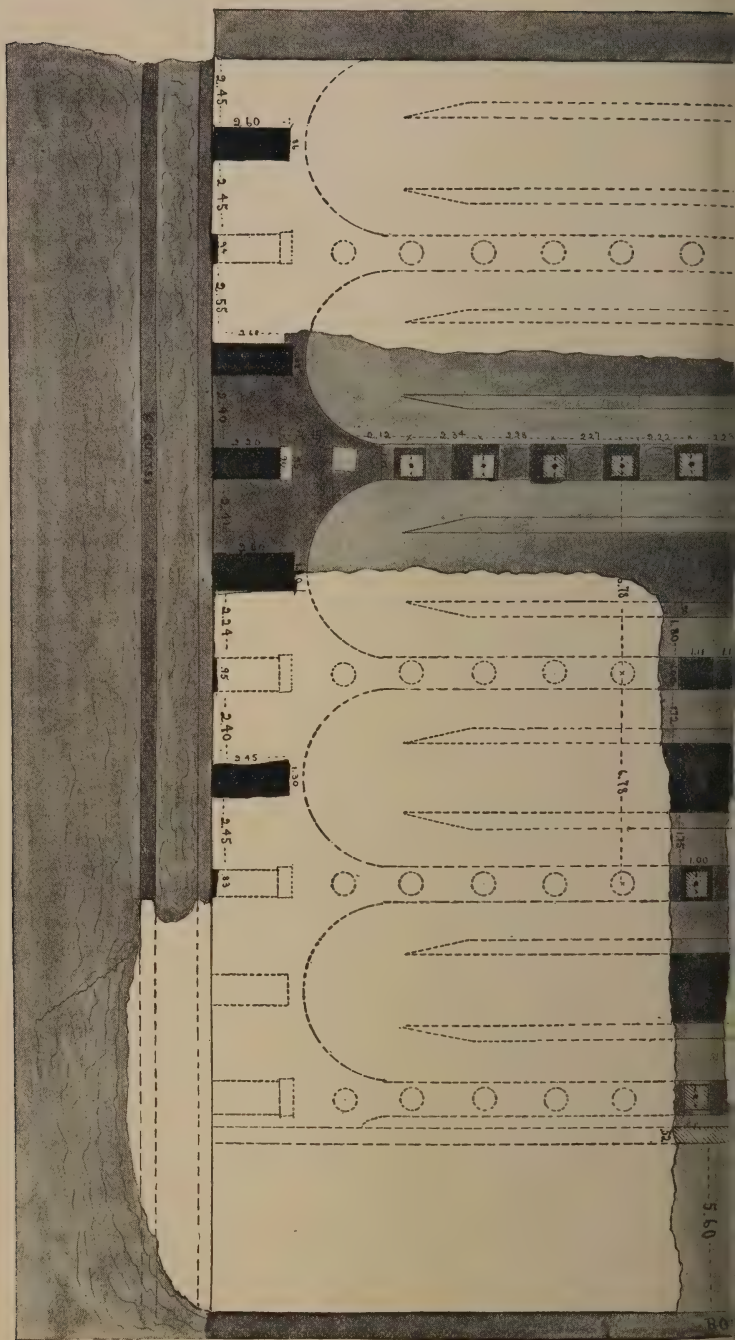
of roof-tiles, shown in Fig. 47, both in retrograde, one having the beginning, the other the ending of some proper name, in letters about 0.015 m. high, should, from the forms of the letters, date from the end of the third century B.C. In addition to these fragments, five coins were found in the *πύλος*. They are the ordinary copper coins of the city, and date from

¹ *Am. J. Arch.*, First Series, XI, p. 152.

230 to 168 B.C.¹ Thus, taking everything into consideration, although of course, these small objects prove nothing satisfactorily either way, it seems safe to say that these baths were constructed under late Greek rather than under Roman influence.

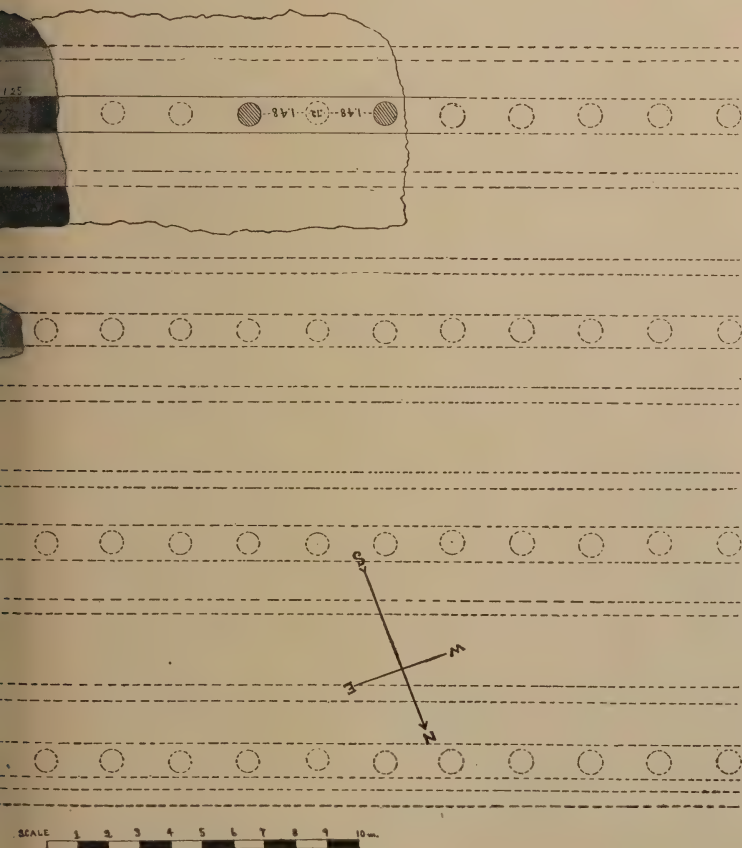
JOSHUA M. SEARS, JR.

¹ *British Museum Cat.*, "Thessaly to Aetolia," p. 189. Type: obverse, head of Zeus, laur., R. ; reverse, ΟΙΝΙΑΔΑΝ, bearded head of bull-headed man, *i.e.* river Achelotis, R.

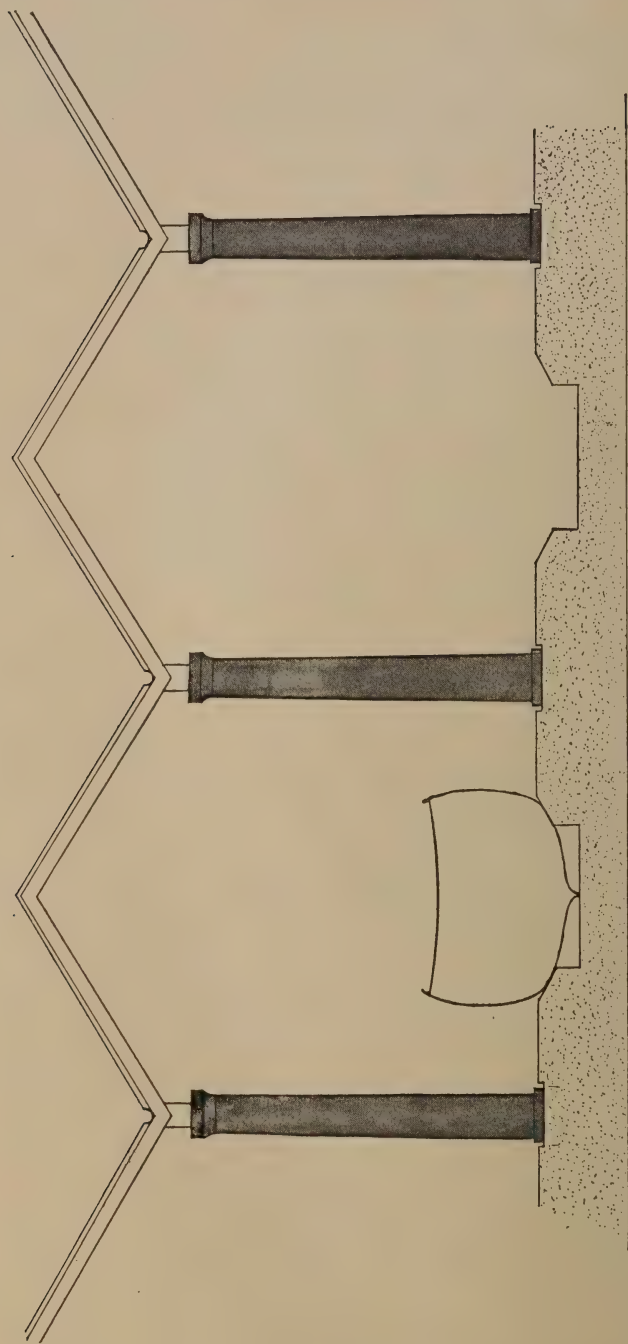


PLAN OF EXCAVATION

WALL



B. POWELL, del.



THE SHIP-SHEDS AT OENIADAE
Cross-section showing the arrangement of columns and slides

American School
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at Athens

OENIADAE

VI

THE SHIP-SHEDS

[PLATES IX-XI]

BEFORE the excavations at Oeniadae in December, 1900, and May, 1901, the ship-sheds, situated on the eastern side of the entrance to the small harbor which lies at the northern end of the city, had been a source of considerable interest to the travellers who had visited the site. Both Leake and Heuzey make mention of them, and even Cyriacus of Ancona, who visited Trikardo in 1436, although he makes no verbal mention of them, gives a drawing which has been reproduced above in the Introduction (Fig. 15); this can scarcely represent anything but the ship-sheds. It shows the five rock supports against the rock cliff as they exist to-day, and likewise represents the name ΑΡΙΞΤΙΔΑΞ , cut on the western interior wall.

On the eastern side of the small harbor, which was undoubtedly reached from the sea by a canal leading out to the west, a hill rose abruptly from the water's edge. In the side of this hill, a large quadrangular space was cut into the solid mass of gray limestone which composed it, and the stone was removed, possibly to be used in the adjacent walls. In this cutting we find constructed what appears to be a combination of ship-sheds and a naval storehouse. The cutting is roughly 41 m. in width and 47 m. in length, at least the latter is the present length of the best preserved side wall from which alone we may judge the

total length, since, in the course of time, the harbor has become filled with mud, and the present level of the water in the marsh is much higher than formerly, as the water permeates the soil and is not allowed to drain away. Digging at the western or open end of the building was thus rendered impossible. Even where it was possible to excavate, there were many difficulties in addition to the boggy soil at the west, for near the walls the ground was strewn with huge blocks of polygonal masonry fallen from the walls above, which with our primitive implements it was practically impossible to remove, and, furthermore, the presence among these of numerous wild fig trees, while adding to the natural beauty of the spot, was an additional hindrance in digging.

As the roof of the building was of necessity rather lofty (*c.* 7 m.), the solid rock of which the side walls were partly composed was not sufficiently high toward the west, and in consequence a wall of polygonal masonry was carefully built on top of it. We find this done on the south side, and may assume that it was also done on the north, where the wall is now badly broken and the rock disintegrated. The wall on the south side was 1.65 m. in thickness.

In the space between the walls we ran two trenches at right angles to one another; one across between the side walls, and the other parallel to them, extending from the back wall to where the influx of water interfered with our work. The results of these trenches are shown in PLATE IX.

It was discovered that the space between the walls was divided into six parallel sections by five rows of columns, which ran from the back wall down to the water's edge and served as supports for the roof. It was likewise found, as was to be expected, that the floor sloped gradually upwards toward the back wall, an illustration of which is shown in PLATE X. Between the southern wall and the rows of columns were five slides, or groves, in which the triremes could be drawn up, but in the extreme northern section the floor was left plain.

At the lower level toward the west the columns, as shown in

PLATE XI, stood on the floor between and above the grooves, but toward the east the slides were gradually raised to a sharper incline, and the columns rose from a kind of trench between them, as shown in Fig. 48. The columns of white limestone rested on square white limestone bases (about 0.80 m. square and 0.30 m. thick), to which they were firmly attached by two iron dowels. The bases in turn were fastened to the solid rock in the same manner, but instead of standing upon the level surface they were set in quadrangular beddings of various sizes, which were cut about 0.30 m. deep into the rock. These bases were set about 2.25 m. apart from centre to centre (which is marked by a square hole, as is usual in columns formed of drums), and this distance does not differ greatly from the corresponding measurement of 2.16 m. found in the ship-sheds at Piraeus.¹ At Piraeus, however, every alternate series had a greater intercolumniation, which Dr. Dörpfeld supposes was due to the fact that the latter columns supported only the peak, whereas the former took the thrust of the roofs from each side.

At Oeniadae there was probably a gable roof between each row of columns, and the span being thus reduced no support was needed for the peak of the roof. At Oeniadae the distance across the slides from centre to centre of the series of columns is 6.78 m., while at Piraeus it was about 6.50 m.; this similarity leads to the natural conclusion that the Athenian and Acarnanian triremes were approximately of the same size.

Of the columns themselves portions of only two, as far as is known, remain *in situ*, and as these are at the edge of the marsh we were unable to uncover them to their bases, but judging from the many drums that are lying about they had a lower diameter of 0.72 m., which decreased to 0.62 m. at the top, showing that the columns had some entasis. Their exact height is not known, but estimating by the height of the projections on the face of the cliff (to be discussed later), they should have been about 7 m. including the capital. These

¹ Cf. *Практика* for 1885, p. 63 ff.



FIGURE 48. — BACK WALL OF SHIP-SHEDS AND SECOND ROW OF COLUMNAR BASES, COUNTING FROM THE SOUTH.

columns, not being intended for show purposes, were left rough and unfinished, but were carefully dowelled together. Only one fragment of a capital was found, but this was fortunately of sufficient size to allow its dimensions to be ascertained. It was of a crude Doric order, roughly finished, with an abacus 0.80 m. square and 0.20 m. thick, while the torus below was also 0.20 m. thick, and with a lower diameter of 0.62 m. flares out in a straight, not curved, line to 0.76 m. above.

As I have said, the distance from centre to centre of the columns was about 2.25 m.; this is the case with the exception of the three upper columns, where we find some irregularity in spacing, in addition to the fact that the last base is not sunk in a cutting, but stands upon the levelled surface of the rock. The series ended in a pilaster, of which nothing but the base remains. This base projects from the buttress of natural rock a distance of 0.46 m. and is 0.95 m. in width; the pilaster was probably slightly smaller. This pilaster really served no purpose except as an ornament to the gray limestone pier against which it is engaged, and which projects from the solid cliff or back wall of the building.

This back wall is entirely cut out of the solid rock, and shows a height of 11 m. The projections just mentioned, of which there are now five remaining, were what first showed the purpose of the building. They are mentioned by Leake,¹ but he states that they were constructed of masonry, which statement shows the cursory nature of his examination. Heuzey says that there were six standing when he visited the site.² These projections occur at intervals of about 2.45 m. along the face of the cliff, and are of two sizes: the larger project about 2.60 m., and are 1.20 m. in width; these come at the head of each slide; the smaller at the ends of the series of columns project only 2.20 m. and are 0.90 m. in width. The former are considerably higher than the latter, but unfor-

¹ W. M. Leake, *Travels in Northern Greece*, vol. III, p. 561.

² L. Heuzey, *L'Acarnanie*, p. 449.

tunately we were able to obtain only the height of the latter (about 7 m.), taking which was attended with extreme difficulty.¹ The purpose of these projections is not clear; it seems probable that they acted as supports to the wall of which they were a part, and so prevented the flaking off of large pieces of rock which occurred at the northern end, probably after the fall of the piers. Heuzey mentions a legend told him by the peasants, who said that large rings of bronze, or *κρικέλλαις*, were once attached to the walls. Their location is not stated, but they were probably at the ends of the larger piers and may have been used in drawing the triremes up the incline. Unfortunately all traces of the attachment of rings to the walls, as well as the legend itself, have disappeared. One primary use of the piers was undoubtedly to serve as a support for the roof, as may be seen from the difference in their heights. As we have seen, the roof was probably in sections, with a gable between each series of columns; thus while the eaves rested on the lower piers at the ends of the rows of columns the peaks of the gables were firmly held by the higher ones.

It is hard to say just what the spaces between the piers were used for. They really are small chambers of almost uniform size, the fourth or open side being formed by the rounded end of the slide which here rises 1.70 m. above the floor of the chamber, which is on a level with the base of the limestone pilaster. The walls of the chambers were roughly cut, especially in their lower corners, and there are distinct traces of a coarse white plaster, with which the walls and floors were probably covered. Possibly the gear for drawing up the ships was placed in these chambers, which open out at the corners into the trenches containing the series of bases for columns, but it would seem strange to have this gear lower than the top of the slide.

¹ Some distance back from the top of the back wall was a drain, 0.50 m. wide, cut in the rock. The stone is here badly disintegrated, but from what remains it is seen that this drain sloped toward the south, and probably caught the water flowing down from above so as to carry it away from the ship-sheds.

The slides up which the triremes were drawn were finished in semicircular curves at their upper ends with a plain upper surface, but farther down toward the water the shape became changed to a kind of trench, or trough, with bevelled edges. These sank between the ridges upon which the columns stood, as shown in PLATE XI. These slides were probably supplied with wooden frames, into which the boat was set and then drawn up; the slide was raised at the top in order to facilitate any examination of the bottom of the boat, while the depression below made the exit and entry easier. Heuzey thought that the slides were of different sizes, but this is not the case. His mistake arises from his failure to observe that several of the piers had fallen (although this is still clearly evident), and he therefore erroneously supposed some slides to be twice the width of others. The five grooves, or troughs, have an average width of 2.25 m., which, with 0.50 m. for the bevelling at each side, gave them a total width of 3.25 m., as compared with a measurement of 3.10 m. in those at Piraeus, whose edges are not bevelled. At the eighth column the grooves at Oeniadae are 0.75 m. in depth.

The sixth section, that on the north, was, as I have said, probably a storeroom, in which spars, ropes, and other materials might be kept. It was partitioned off from the ship-sheds proper by means of a wall of white limestone, 0.52 m. in breadth, just to the north of the last row of columns. Two courses of this wall now remain, on which the workmen may be seen standing in Fig. 49. Whether or not there were doorways in this wall was not discovered, since we found it very difficult to dig here, owing to the huge masses of fallen stone, but it seems likely that there were two or three means of communication between the two divisions of the building. The width of this room is about 5.60 m. Whether or not there were doors in the outside wall at the north cannot be known, but in the south wall no openings appear. The drawing of Cyriacus, with its distorted perspective, may represent an arched portal as existing in this wall when he visited the city.



FIGURE 49.—SHIP-SHEDS AT OENIADAE. TRANSVERSE TRENCH SHOWING SLIDES AND PARTITION-WALLS OF STOREROOM.

Of materials or apparatus used in connection with boats only one discovery was made. This was a small lead weight (Fig. 50), having a total length of 0.66 m. A small hole is pierced through the neck at the top, through which a cord might be passed, and in the bottom is a small indentation which brings to mind the same arrangement in the sounding leads of ships to-day, the hole being filled with tallow for determining the character of the bottom. Our lead may have been used for the piloting of boats through the channel out to the sea.



FIGURE 50. — LEAD WEIGHT FROM THE SHIP-SHEDS.



FIGURE 51. — TILE FROM SHIP-SHEDS.

ered, which belonged to the superstructure of the building. The best preserved of these (Fig. 51) gives a name in the genitive, *Φίλωνος*. The letters are about 0.015 m. in height and show broadened apices to the straight strokes. The *o* is much smaller than the other letters. A fragment (Fig. 52), showing only the ending —*vos*, is the same in style and evidently is part of the same name. This name immediately recalls the Philon, son of Excestides, who was the architect of the great arsenal at Piraeus in 330–329 B.C. and who later built the portico of the Telesterion at Eleusis sometime between 318 and 307 B.C.¹ Of course, we cannot be certain that our stamp refers to the same man, but there is a possibility that such was the case.

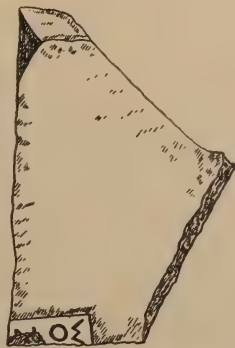


FIGURE 52. — TILE FROM SHIP-SHEDS.

Two other fragments (Fig. 53) show the beginning and end of the name *Ὀμίλου*, in letters 0.0175 m. high. These letters

¹ Cf. Vitruv. VIII, praef. 17.

are different in style and possibly belong to an earlier period than the preceding.

Another flat tile (Fig. 54) shows the word [$\text{'A}\kappa$] *apnâno*[s] in broad letters 0.015 m. in height; the *o* here is much reduced



FIGURE 53. — TILES FROM THE SHIP-SHEDS.

in size. The stamp probably included the name of some Acarnanian workman who put his nationality after his own name.

A stamped jug-handle (Fig. 55) gives us a complete name, $\text{'A}\rho\iota\sigma\tau\acute{\iota}\omega\nu$, in letters 0.007 m. high. The total length of the seal is only 0.05 m. The late form of sigma is to be noticed.

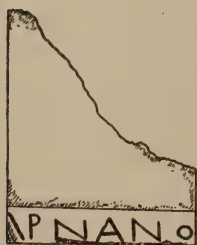


FIGURE 54. — TILE FROM THE SHIP-SHEDS.

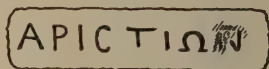


FIGURE 55. — TILE FROM THE SHIP-SHEDS.

A small curved fragment of tile (Fig. 56), which evidently formed part of the neck of a pipe, completes the list of tiles bearing stamps. This stamp is a small oblong, only 0.03 m. in length and 0.01 m. in width, inside of which are letters only 0.005 m. in height. The curious letters are evidently Roman and give the Latin form *Zoil(u)s* of the Greek name, *Ζωῖλος*.

One bronze coin, dating probably from the third century A.D., bears the head of a Roman emperor (Probus?) on the

obverse, and on the reverse a nude figure standing on a rock, a staff in the left hand and right arm stretched out; of the inscription only the letters CONS appear. A small rod or needle of bronze completes the list of small finds. This piece is 0.15 m. in length and is about 0.003 m. square, one end being pointed; at 0.009 m. from each end is a small slot, which may have served to hold the threads for coarse sewing.



FIGURE 56. — TILE FROM THE SHIP-SHEDS.

The date of these ship-sheds cannot be decided with certainty. None of the smaller finds date from earlier than the third century B.C., while, on the other hand, the construction would point to an earlier date.

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BIBLIOGRAPHY

OF

ARCHAEOLOGICAL BOOKS

1903

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**** Books, pamphlets, and other matter for the Bibliography should be addressed, during Professor Fowler's absence in Europe, to Professor JAMES M. PATON, Wesleyan University, Middletown, Conn.*

GENERAL AND MISCELLANEOUS

P. P. Albert, Die Geschichts- und Altertumsvereine Badens. Vortrag bei der 49. Generalversammlung der deutschen Geschichts- und Altertumsvereine am 25. September 1901 zu Freiburg i. Br. Heidelberg, 1903, C. Winters Universitätsbuch. 32 pp. 8vo. — **J. G. C. Anderson**, Asia Minor. Map 56 × 43 cm., scale 1:2,500,000; index (11 pp.). [Murray's handy classical maps.] London, 1903, J. Murray. 4to. — *Studia Pontica*. I: A Journey of Exploration in Pontus. Brussels, 1903, Lamertin. 104 pp.; 9 maps; 16 figs. 8vo.

A. F. Barker, An Introduction to the Study of Textile Design. London, 1903, Methuen. 230 pp.; figs. 8vo. 7s. 6d. — **H. Barth**, Constantinople (Coll. des Villes d'art célèbres). Paris, 1903, Laurens. 180 pp.; 103 figs. Small 4to. — *Beiträge zur Bücherkunde und Philologie* August Wilmanns zum 25. März 1903 gewidmet. Leipsic, 1903, O. Harrassowitz. [Partial contents: E. Jacobs, Cristoforo Buondelmonti. Ein Beitrag zur Kenntniss seines Lebens u. seiner Schriften; pp. 313-340. — R. Weil, Oeniadae. Ein Beitrag zur nord-griechischen Reise des Cyriacus von

Ancona; pp. 341-354; 3 cuts. — C. G. Brandis, Neun Briefe Niebuhrs aus Italiens; pp. 527-551.] — *Beiträge zur Kunstgeschichte* Franz Wickhoff gewidmet. Vienna, 1903, A. Schroll & Co. [Partial contents: A. Riegl, Oströmische Beiträge; pp. 1-11; 10 cuts. — M. Dvořák, Les Aliscans; pp. 11-24; 3 cuts.] — **L. Bell**, The Art of Illumination. London, 1903, Constable. 354 pp. 8vo. — **O. B. [enndorf]**, Vom Österreichischen Archäologischen Institute. Als Manuskript gedruckt. Brünn, 1903, M. Rohrer. 31 pp. 8vo. — **C. Blanc**, La peinture. Paris, 1903, Laurens. 240 pp.; 67 figs. 8vo. — **D. Blanchet** and **J. Toutain**, Histoire de l'antiquité. Paris, 1902, Belin. 17 maps; 69 cuts. 8vo. — Histoire de l'Orient et de la Grèce. Paris, 1902, Belin. 27 maps; 72 cuts. 12mo. — **L. Bordet** and **L. Ponnelle**, Conversazioni romane. [Contents: Fra Angelico; la Sculpture grecque au Vatican; Luca Signorelli; l'Architecture de Saint Pierre; Giotto à Assise; Raphael.] Paris, 1903, Leroux. vi, 159 pp. 8vo. — **Josef Bühlmann**, Die Bauformenlehre. 2 Aufl. (Handbuch der Architectur,

- 1 Thl. 2 Bd.). Stuttgart, 1901, A. Bergsträsser. iv, 272 pp.; 310 figs.; Lex. 8vo. \$4.00.
- L. P. di Cesnola.** The Descriptive Atlas of the Cesnola Collection of Cypriote Antiquities. Bd. III. New York, 1903, The Metropolitan Museum. 150 pls. Folio. — **S. Charléty,** Histoire de Lyon depuis les origines jusqu'à nos jours. (Chap. Ier: Lyon à l'époque romaine.) Lyons, 1903, Rey. 8vo. — **L. Chassaigne** and **G. Chauvet,** Analyses de bronzes anciens du département de la Charente. Collection de M. Gustave Chauvet. Ruffec, 1903, L. Picat. liii, (a)-(i), 67 pp. 8vo. — **G. Chauvet,** Notes sur l'art primitif. Angoulême, 1903, Coquemard. 8vo. — **Ch. Chipiez,** see **Perrot.** — **C. R. Cockerell,** Travels in Southern Europe and the Levant, 1810-1817. The journal of C. R. C. Edited by his son, S. P. Cockerell. London, 1903, Longmans, Green & Co. xii, 286 pp.; portrait. 8vo. — **John Cooke,** Wakeman's Handbook of Irish Antiquities. New edition. London, 1903, Murray. Figs. Cr. 8vo. \$2.63. — **F. Cumont,** Die Mysterien des Mithra. Deutsch von G. Gerich. Leipsic, 1903, B. G. Teubner. xvi, 176 pp.; 2 pls.; 9 figs. 8vo. — **E. Cuyer,** Anatomie artistique des animaux. Paris, 1902, J.-B. Baillière. xii, 300 pp.; 143 figs. 8vo.
- H. Derenbourg,** Les Manuscrits arabes de l'Escurial. Vol. I, fasc. I: Morale et Politique. Paris, 1903, Leroux. xxviii, 81 pp. 8vo. — **A. Dieterich,** Eine Mithrasliturgie. Leipsic, 1903, B. G. Teubner. x, 230 pp. 8vo. — **G. Ducoudray,** Histoire et civilisation de l'ancien Orient et de la Grèce. Paris, 1903, Hachette. Maps, cuts. 8vo.
- Elenco degli edifizii monumentali in Italia.** Rome, 1902. viii, 573 pp. 8vo.
- A. Fähr,** Geschichte der Bildenden Künste. 2. verb. u. erw. Aufl. Freiburg i. B., 1902-1903, Herder. 37 pls.; 940 figs. 4to. — **H. C. Fanshawe,** Delhi: Past and Present. London, 1903, Murray. Maps; figs. Demy 8vo. \$4.75. — **R. Fitzner,** Forschungen auf der bithynischen Halbinsel. Rostock, 1903, C. Volkmann. vii, 183 pp.; 10 figs.; 3 geological sections; map. 8vo.
- G. Gerich,** see **Cumont.** — **J. Grill,** Die persische Mysterienreligion im römischen Reich und das Christentum. (Sammlung gemeinverständlicher Vorträge und Schriften aus dem Gebiet der Theologie und Religionsgeschichte 34.) Tübingen and Leipsic, 1903, J. C. B. Mohr. 60 pp. 8vo.
- Sadakichi Hartmann,** Japanese Art. New York, 1903, L. C. Page & Co. 32 ill., 6 in color. 12mo. \$1.60. — **R. G. Hatton,** Perspective for Art Students. London, 1902, Chapman & Hall. 288 pp.; 208 figs. 8vo. — **Ed. Heyck,** Frauenschönheit im Wandel von Kunst und Geschmack (Sammlung illustrierter Monographien VIII). Bielefeld, 1902, Velhagen und Klasing. 170 pp.; 130 figs. 8vo. — **J. M. Hoppin,** Great Epochs in Art History. New revised edition. Boston, 1903, Houghton, Mifflin & Co. 8vo. — **G. Houdard,** La richesse rythmique musicale de l'antiquité. Paris, 1903, Picard. 84 pp. 8vo. — **E. Hymmen,** Das Paradies der Bibel, der arischen Völker u. Götter Urheimat, ultima Thule, sowie das varianische Schlachtfeld mit Hülfe niederrheinisch-bergischer Mythensforschung aufgefunden in den Rheinlanden. 2. Aufl. Leipsic, 1902, G. Fock. iv, 107 pp. 8vo.
- F. Imhoof-Blumer,** Kleinasiatische Münzen. Bd. III [Sonderschriften des Österreichischen Archäologischen Instituts in Wien]. Vienna, 1902, Hölder. Pp. 302-578; 11 pls. 4to.
- C. Jamot,** Inventaire général des vieux Lyon. Paris, 1903, Rey et Cie. 64 pp.; ill.; 2 plans. 8vo. — **D. Joseph,** Geschichte der Baukunst vom Altertum bis zur Neuzeit. Berlin, 1902, B. Hessling. 1. u. 2. Bd. xxxv, 991 pp.; 773 cuts. 8vo. — **C. Julian,** Gallia. 2. éd. corrigée. Paris, 1902, Hachette. 342 pp.; 140 figs.; map. 8vo.
- J. Kaerst,** Die antike Idee der Oekumene in ihrer politischen und kulturellen Bedeutung. Akademische Antrittsvorlesung. Leipsic, 1903, B. G. Teubner. 34 pp. 8vo. — **R. Kanzler,** Gli avori dei musei profano e sacro della Biblioteca Vaticana. (Collezioni artistiche, archeologiche e numismatiche dei Palazzi Pontifici. Vol. I.) Rome, 1903, Officina Danesi. x, 16 pp.; 55 pls. Folio. — **O. V. Kcho** and **H. Storck,** Tegninger of Aeldre Nordisk Arkitek-

- tur. Fjerde Samling. Copenhagen, 1902, Hagerup. In parts. Folio.
- **R. v. Kekule von Stradonitz**, Zur Geschichte des archäologischen Unterrichts in Berlin unter Friedrich Wilhelm III. Rede zur Gedächtnisfeier Friedrich Wilhelms III. Berlin, 1902, G. Schade. 22 pp. 4to.
- **C. Keller**, Die Abstammung der ältesten Haustiere. Phylogenetische Studien über die zoologische Herkunft der in prähistorischer Zeit erworbenen Haustierarten nebst Untersuchungen über die Verbreitungswege der einzelnen zahmen Rassen. Zürich, 1902.
- **G. v. Keussler**, Die Grenzen der Aesthetik. Leipsic, 1903, H. Seemann Nachf. 165 pp. 8vo. 3 M.
- **F. Kick**, Die Baukunst in Sizilien. I Theil: Die griech., röm., byzantin., arab., und normann. Baukunst. Vienna, 1903, A. Schroll & Co. v, 104 pp.; 9 pls.; figs. Folio. 24 M.
- **C. Koehl**, Die Bandkeramik der steinzeitlichen Gräberfelder und Wohnplätze in der Umgebung von Worms. Festschrift zur 34. allgemeinen Versammlung der deutschen anthropologischen Gesellschaft dargeboten vom Wormser Altertumsverein. Worms, 1903. 50 pp.; 12 pls. 4to.
- J. Lange**, Die menschliche Gestalt in der Geschichte der Kunst. Von der zweiten Blütezeit der griechischen Kunst bis zum XIX. Jahrh. Hrsg. v. P. Köbke, aus dem Dänischen übertragen von M. Mann. Strassburg i. E., 1903, J. H. E. Heitz. xvii, 451 pp.; 98 pls. 4to.
- **K. Lange**, Das Wesen der Kunst. Grundzüge einer realistischen Kunstlehre. Berlin, 1902, Grote. 2 vols. xvi, 405 pp. 8vo.
- **R. de Lasteyrie**, Bibliographie générale des travaux historiques et archéologiques publiés par les sociétés savantes de la France. Paris, 1900-03, Leroux. Vol. III and fasc. 1, 2, of Vol. IV. 4to.
- **H. Lechat**, Catalogue sommaire du musée de moulages pour l'histoire de l'art antique (Annales de l'Université de Lyon. Catalogue des Collections Universitaires). Lyon, 1903, A. Rey. xiv, 158 pp.; plan. 8vo.
- **J. Le cornu**, La navigation aérienne [Chap. Ier: Légendes de l'antiquité]. Paris, 1903, Nony.
- **M. G. López**, Manual completo de artes cerámicas ó fabricación de objetos de tierras cocidas en todas sus aplicaciones. Recopilación de los datos más importantes de las mejores publicaciones nacionales y extranjeras. Nueva edición ampliada. Madrid, 1902, A. Santarén. 270-328 pp. 8vo. \$1.20.
- **E. Caetani Lovatelli**, Ricerche archeologiche. Rome, 1903, E. Loescher. 229 pp.; 13 figs. 8vo.
- **R. Lunn**, Pottery. London, 1903, Chapman & Hall. 116 pp. 8vo.
- Magni**, Histoire de l'art italien depuis son origine jusqu'au XIX^e siècle. Rome, 1903, Off. poligrafica Romana. 3 vols. pp. 549, 617, 892; ill. 8vo.
- **A. Malet**, L'antiquité: Orient, Grèce, Rome. Deuxième partie: la Grèce. Paris, 1903, Hachette. 4 maps; 90 cuts. 8vo.
- **J. Marcuse**, Bäder und Badewesen in Vergangenheit und Gegenwart. Stuttgart, 1903, F. Enke. 165 pp.; 22 figs. 8vo.
- **A. Melani**, Manuale d'architettura italiana antica e moderna. 4th ed. (Manuali Hoepli). Milan, 1903, Ulrico Hoepli. xxv, 560 pp.; 67 figs.; 136 pls.; 8vo. Lire 7.50.
- **Nell' arte e nella vita** — Persone, luoghi e cose presenti. Milan, 1904, Hoepli.
- **Ed. Meyer**, Zur Theorie und Methodik der Geschichte. Geschichtsphilosophische Untersuchungen. Halle, 1903, M. Niemeyer. viii, 56 pp. 8vo.
- **O. Montelius**, Die älteren Kulturperioden im Orient und in Europa. I. Die Methode. Stockholm, Selbstverlag; also Asher & Co., Berlin, 1903. xvi, 110 pp.; 498 figs. 4to.
- **Moreau de Nérís**, Nérís, capitale des Gaules. Les Eaux de Beauté. Paris, 1902, E. Leroux. 386 pp.; pl.; many ill. 8vo.
- **E. Müntz**, see **Le Musée d'Art**.
- **Le Musée d'Art**, Galerie des Chefs-d'œuvre et précis de l'Histoire de l'Art depuis les Origines jusqu'au XIX^e siècle. Ouvrage publié sous la direction de M. Eugène Müntz. Paris, 1903, Larousse. 267 pp.; 50 pls.; 900 ill. 4to.
- **Múzeum**, A magyar nemzeti multja és jelene Alapításának Századik évfordulója alkalmából. Irták. A magyar nemzeti múzeum tisztviselői. Budapest, 1902. xl, 384 pp.; numerous pls. and cuts. 4to.
- J. Naue**, Die vorrömischen Schwerter aus Kupfer, Bronze u. Eisen. Munich, 1903, Piloty u. Loehle. vii, 126 pp., with album of 45 pls. 4to.
- **C. E. Noyes**, The Enjoinment of Art. Boston, 1903, Houghton, Mifflin & Co. xiii, 101 pp. 8vo. \$1.00.

- E. Oberhammer**, Die Insel Cypern. Eine Landeskunde auf historischer Grundlage. Gekrönte Preisschrift. 1. Teil: Quellenkunde u. Naturbeschreibung. Munich, 1903, Th. Ackermann. xvi, 488 pp.; 12 maps. 8vo.
- F. Pacha**, Le Caire. Leipsic, 1903, Seemann. 160 pp.; 145 figs. 4to. Fr. 3. — **Perrot and Chipiez**, Histoire de l'art dans l'antiquité. Vol. 8: La Grèce archaïque, la sculpture par G. Perrot. Paris, 1904, Hachette et Cie. xv, 756 pp.; 14 pls.; 352 cuts. 4to. — **F. Perzynski**, Der japanische Farbenholzschnitt ("Die Kunst"). Berlin, 1903, J. Bard. 93 pp.; 10 figs. 16mo. — **H. Pudor**, Laokoon. Kunsttheoretische Essays. Leipsic, 1902, H. Seemann, Nachf. 252 pp. 8vo.
- F. Quilling**, Die Nauheimer Funde der Hallstatt- und Latène-Periode in den Museen zu Frankfurt a. M. und Darmstadt. Ausgrabungs-Bericht auf Grund der G. Dieffenbachschen Protokolle verfasst. Herausg. aus Anlass des 25 jähr. Bestehens des städtischen histor. Museums am 13. Juni 1903 von den städtischen Behörden in Frankfurt a. M. Frankfurt a. M., 1903, Schirmer & Mahlau. 102 pp.; 16 pls.; many ill. 4to.
- G. Radde**, Die Sammlungen des kaukasischen Museums. Bd. V: Archäologie, bearbeitet von Gräfin P. S. Uwarow. Tiflis, 1902. xvi, 229 pp.; 21 pls.; 22 figs. 4to. — **H. Reich**, Der Mimus. Ein litterarentwicklungsgeschichtlicher Versuch. Berlin, 1903, Weidmannsche Buchh. 1. Bd., 1. Teil: Theorie des Mimus. xii, 413 pp. 2. Teil: Entwicklungsgeschichte des Mimus. 417-900 pp.; plate. 8vo. — **Th. Reinach**, L'Histoire par les Monnaies. Essais de numismatique ancienne. Paris, 1902, E. Leroux. iv, 269 pp.; 6 pls.; 20 figs. 8vo. — **C. Robert**, Führer durch das Archäologische Museum der Universität Halle-Wittenberg. 2. umgearb. Aufl. Halle a. S., 1903, M. Niemeyer. 94 pp.; plan. 8vo. — **F. Roe**, Ancient Coffers and Cupboards: Their History and Description from the Earliest Times to the Middle of the Sixteenth Century. London, 1903, Methuen. — **A. Roersch**, Etienne-Winand Pighius. (Extrait de la Biographie Nationale publiée par l'Académie royale des sciences, des lettres et des beaux-arts de Belgique, t. XVII.) 5 pp. 8vo.
- E. N. Santini de Riols**, Les parfums magiques. Odeurs, onctions, fumigations, exhalaisons, inhalations en usage chez les anciens dans les temples, pour consulter les dieux dans le sommeil sacré ou en particulier. Paris, 1903, Genonceaux. 8vo. — **J. Sarre**, Denkmäler persischer Baukunst. Berlin, 1902, Wasmuth. In parts. Folio. — **A. H. Sayce**, The Religions of Egypt and Babylonia. The Gifford Lectures on the ancient Egyptian and Babylonian conception of the divine delivered in Aberdeen. Edinburgh, 1903, T. Clark. viii, 809 pp. 8vo. — **J. v. Schlosser**, Randglossen zu einer Stelle Montaigne's. (Ueber Ursprung der Kunst.) 1903. 12 pp. 4to. — **A. Schmarsow**, Unser verhältnis zu den bildenden Künsten. 6 Vorträge über Kunst und Erziehung. Leipsic, 1903, Teubner. iii, 160 pp. 8vo. — **J. H. Slater**, Art Sales of the Year 1902. London, 1903, Virtue. 305 pp. 8vo. — **M. A. Stein**, Sand-buried Ruins of Khoutan. London, 1903, T. Fisher-Unwin. xliii, 524 pp.; pl.; map; 133 figs. 8vo. — **H. Storck**, see **O. V. Kcho**. — **A. Streit**, Das Theater. Untersuchungen über das Theater-Bauwerk bei den klassischen und modernen Völkern. Vienna, 1903, Lehmann & Wentzel. viii, 267 pp.; 26 pls.; 48 figs. Folio. — **L. v. Sybel**, Die Sammlung der Gypsabgüsse der Universität Marburg. Verzeichnis. Marburg, 1903, N. G. Elwert'sche Verlagsbuchh. 38 pp. 8vo.
- G. Tocilescu**, Monumentele epigrafice si sculpturale ale museului national di antichitati din Bucuresti. Partea I: colectiunea epigrafica a museului pana in anul 1881. Bucharest, 1902. 488 pp.; 4 pls. 4to. — **J. Toutain**, see **D. Blanchet**. — **F. E. Turner**, Short History of Art. New ed. London, 1903, Sonnenschein. 400 pp. 8vo. 3s. 6d.
- P. S. Uwarow**, see **G. Radde**.
- G. Weicker**, Der Seelenvogel in der alten Litteratur u. Kunst. Eine mythologisch-archäologische Untersuchung. Leipsic, 1902, B. G. Teubner. vii, 218 pp.; 103 figs. 4to. — **Henry Wotton**, Elements of Architecture. (Reprint, 350 copies.) London, 1903, Longmans, Green & Co. 10s. 6d. net.

EGYPTIAN ARCHAEOLOGY

- A. Bouché-Leclercq**, *Histoire des Lagides*. T. I. Paris, 1903, E. Leroux. 8vo.
- W. Croenert**, *Denkschrift betreffend eine deutsche Papyrusgrabung auf dem Boden griechisch-römischer Kultur in Ägypten*. Bonn, 1902, C. Georgi. 31 pp.; map; pl. 8vo.
- N. de G. Davies**, *The Rock Tombs of Deir el Gebrâwi*. Part II. (Twelfth Memoir of the Archaeological Survey of Egypt.) London, 1903. 30 pls., 2 colored. 4to. — *The Rock Tombs of El-Amarna*. Part I. (Thirteenth Memoir of the Archaeological Survey of Egypt.) London, 1903.
- Egypt Exploration Fund**, *Archaeological Report, 1902-03*. Comprising the work of the Egypt Exploration Fund and the progress of Egyptology during the year 1902-03. Edited by F. Ll. Griffith. London, 1903. 73 pp.; pl.; 5 maps. 4to.
- E. J. Goodspeed**, *Greek Papyri from the Cairo Museum; with Papyri of Roman Egypt from American Collections*. (Decennial Publications of the University of Chicago, Vol. V.) Chicago, 1902, University of Chicago Press. 78 pp. 4to. — **B. O. Grenfell** and **A. S. Hunt**, *The Oxyrhynchus Papyri*. Part III. (Fifth Annual Volume of the Graeco-Roman Branch of the Egypt Exploration Fund.) London, 1903. xii, 338 pp.; 6 pls. 4to.
- A. S. Hunt**, see **B. O. Grenfell**.
- A. C. Mace**, see **D. Randall-MacIver**. — **L. Mitteis**, *Griechische Urkunden in der Papyrussammlung zu Leipzig*. 1 Bd. 1 Lfg. Leipsic, 1903, B. G. Teubner. 4, 91 pp.; pl. 4to.
- Ch. Palanque**, *Le Nil de l'époque pharaonique, son rôle et son culte en Égypte*. (Bibliothèque de l'École des Hautes Études. Section historique et philologique, fasc. 144.) Paris, 1903, E. Bouillon. xiv, 132 pp. 8vo. — **W. M. Flinders Petri**, *Abydos*. Part II, 1903. With a chapter by F. Ll. Griffith (Twenty-fourth Memoir of the Egypt Exploration Fund). London, 1903. viii, 56 pp.; 64 pls. 4to.
- D. Randall-MacIver** and **A. C. Mace**, *El Amrah and Abydos, 1899-1901*. With a chapter by F. Ll. Griffith. (The Egypt Exploration Fund. Special extra publication.) London, 1902. x, 108 pp.; 60 pls. 4to.
- Service des Antiquités de l'Égypte**, *Catalogue général des antiquités égyptiennes du musée du Caire*. Vol. II: *Sarcophages antérieurs au nouvel empire* p. P. Lacau. Fasc. 1. Cairo, 1903, Imprimerie de l'Institut franç. d'archéologie orientale. 4to. — Vol. VIII, Nos. 32001-32367: *Greek Moulds*, by C. C. Edgar. Cairo, 1903. xvii, 89 pp.; 33 pls. 4to. — Vol. IX, Nos. 9401-9449: *Textes et Dessins Magiques* p. G. Daressy. Cairo, 1903, Imprimerie de l'Institut franç. d'archéologie orientale. 64 pp.; 13 pls. 4to. — Vol. X, Nos. 10001-10869: *Greek Papyri*, by B. P. Grenfell and A. S. Hunt. Oxford, 1903, The University Press. 116 pp. 4to.
- U. v. Wilamowitz-Moellendorf**, *Timotheos, Die Perser*. Aus einem Papyrus von Abusir im Auftrage der Deutschen Orientgesellschaft herausgegeben. Leipsic, 1903, J. C. Hinrichssche Buchh. 126 pp.; pl. 8vo. — *Der Timotheos-Papyrus, gefunden bei Abusir am 1. Feb., 1902*. Lichtdruckausgabe. Leipsic, 1903, J. C. Hinrichssche Buchh. 15 pp.; 7 pls. Folio.

ORIENTAL ARCHAEOLOGY

- Apostolidès**, *Origine asianique des inscriptions préhelléniques de l'île de Lemnos*. Mémoire lu à l'Institut Égyptien dans les séances des 6 et 27 déc. 1901 et le 6 mai 1902. Cairo, 1903, Imprimerie Nationale. 61 pp.; 2 pls.; 7 figs. 8vo.
- E. R. Bevan**, *The House of Seleucus*. London, 1902, E. Arnold. 2 vols. Pp. xii, 330; viii, 333; 6 pls.; 3 maps. 8vo. — **C. Bezold**, *Ninive und Babylon* (Monographien zur Weltgeschichte). Bielefeld, 1903, Velhagen u. Klasing. 104 figs. 4to. — **Billerbeck**, *Der Festungsbau im alten Orient*. 2. verb. Aufl. (Der alte Orient I, 4). Leipsic, 1903, J. C. Hinrichs Verl. 32 pp.; 15 figs. 8vo.

- **W. de Gray Birch** and **T. G. Pinches**, *The Bronze Ornaments of the Palace Gates of Balawat (Shalmaneser II, b.c. 859-825)*. Part V. London s. a. 4, 15 pp.; 19 pls. Folio.
- **F. J. Bliss** and **R. A. Macalister**, *Excavations in Palestine during the Years 1898-1900*. With a chapter by Professor Dr. Wünsch. London, 1902. xvi, 276 pp.; 102 pls.; 96 cuts. 4to.
- **H. C. Butler**, *Architecture and Other Arts in Northern Central Syria and the Djebel-Haurân*. Part II of the Publications of an American Archaeological Expedition to Syria in 1899-1900. New York, 1903, The Century Co. xxvi, 433 pp.; 600 illus. 4to. \$20.00 net.
- H. V. Hilprecht**, *Die Ausgrabungen der Universität von Pennsylvania im Bel-Tempel zu Nippur*. Ein Vortrag. Leipsic, 1903, J. C. Hinrichssche Buchhandlung. 77 pp.; 56 cuts; map. 8vo. — *Explorations in Bible Lands during the Nineteenth Century*. With nearly Two Hundred Illustrations and Four Maps. Philadelphia, 1903, A. J. Holman & Co. xxiv, 859 pp. 8vo.
- **G. Hölscher**, see **Thiersch**. — **J. Hunger**, *Becherwahrung bei den Babyloniern nach zwei Keilschrifttexten aus der Hammurabizeit*. Dissertation. Leipsic, 1903. 58 pp. 8vo.
- W. v. Landau**, *Beiträge zur Altertumskunde des Orients*. III: *Die Stele von Amrith. Die neuen phönikischen Inschriften*. Leipsic, 1903, E. Pfeiffer. 29 pp.; 4 cuts. 8vo.
- **E. Lindl**, *Entstehung und Blüte der altorientalischen Kulturwelt*. Cyrcus. (Weltgeschichte in Charakterbildern. 1. Abt.) Munich, 1903, Kirchheimsche Verlagsbuchh. 121 pp.; 98 cuts; map. 8vo.
- R. A. Macalister**, see **Bliss**.
- H. Omont**, *Missions archéologiques françaises en Orient aux XVII^e et XVIII^e siècles*. Documents publiés p. H. O. (Collection de documents inédits sur l'histoire de France.) Paris, 1902, Imprimerie Nationale. 1. partie: xvi, 662 pp.; 2. partie: 663-1237 pp. 4to.
- Th. G. Pinches**, see **Birch**.
- G. Schiaparelli**, *L'Astronomia nell'antico testamento*. Milan, 1903, U. Hoepli. viii, 196 pp.; fig. 8vo.
- B. Teloni**, *Letteratura Assira*. Milan, 1903, U. Hoepli. xv, 266 pp.; 3 pls. 8vo.
- **F. Thiersch** and **G. Hölscher**, *Kurzer Bericht über eine Reise durch Phönizien und Palästina*. 1903. 15 pp. 8vo.
- W. Wroth**, *Catalogue of the coins of Parthia*. London, 1903. lxxxviii, 289 pp.; 37 pls. 8vo.

CLASSICAL ARCHAEOLOGY

GREEK AND ROMAN

(Works treating of the monuments of the Greeks and Romans, but not exclusively of those of either.)

- W. Amelung**, *Die Skulpturen des Vatikanischen Museums*. Im Auftrage und unter Mitwirkung des Kaiserl. Deutschen Archäologischen Instituts beschrieben. Vol. I. Text and Atlas. Berlin, 1903, G. Reimer. x, 915 pp.; 121 pls. 8vo and 4to.
- **W. J. Anderson** and **R. Ph. Spiers**, *The Architecture of Greece and Rome*. A sketch of its historic development. London, 1902. 318 pp.; 179 cuts. 8vo.
- **Apophoreton**. *Der 47. Versammlung deutscher Philologen und Schulmänner überreicht von der Graeca Halensis*. Berlin, 1903, Weidmannsche Buchhandlung. [Partial contents: W. Dittenberger, *Athenäus und sein Werk*. Pp. 1-28. — G. Wissowa, *Römische Bauernkalen-*

der. Pp. 29-51. — U. Wilcken, *Zur Drakontischen Verfassung*. Pp. 85-98. — C. Robert, *Zur Oedipus-sage*. Pp. 99-115; 2 figs. — Ed. Meyer, *Die Alliaschlacht*. Pp. 136-191; map.]

Beiträge zur alten Geschichte und griechisch-römischen Altertumskunde. Festschrift zu Otto Hirschfelds sechzigstem Geburtstag. Berlin, 1903, Weidmannsche Buchh. x, 513 pp.; portrait. 8vo. [Partial contents: U. Rh. Boissvain, *Die Inschrift der nach dem Perserkriege in Olympia gestifteten Zeusstatue* (Paus. V, 23, 1). Pp. 69-74. — O. Benndorf, *Historische Inschriften vom Stadttor von Xanthos*. Pp. 75-86. — F. Hiller von Gärtringen, *Der Verein der Bakchisten und die Ptolemäerherrschaft in Thera*. Pp. 87-99. — S. de Ricci, *Deux papyrus grecs de Soknopaiou Nêsos au musée du Louvre*. Pp. 104-107. — Fr. W. v. Bissing, *Συρβαρις*

Aluvn. Pp. 164-166. — R. Cagnat, *Africana*. Pp. 167-170. — C. Patsch, *Zur Landeskunde von Dalmatien*. Pp. 198-204. — J. Jung, *Zur Landeskunde Tuscien*. Pp. 205-213. — A. v. Domaszewski, *Die Eigenschaftsgötter der altrömischen Religion*. Pp. 242-248. — E. Samter, *Zu römischen Bestattungsbräuchen*. Pp. 249-256. — H. Lucas, *Ein Märchen bei Petron*. Pp. 257-269; 5 figs. F. Cumont, *Gladiateurs et Acteurs dans le Pont*. Pp. 270-279; fig. — H. Dressel, *Ludi decennales auf einem Medaillon des Pius*. Pp. 280-285; 2 figs. — K. Regling, *Römische Aurei aus dem Funde von Karnak*. Pp. 286-298; pl. — E. Pridik, *Ein unediertes Goldmedaillon des Kaisers Numerian*. Pp. 299-302; fig. — M. Rostowzew, *Augustus und Athen*. Pp. 303-311; 5 figs. — O. Kern, *Zum Orakel des Apollon Koropaios*. Pp. 322-326. — P. v. Bienkowski, *Zu Tacitus Germania c. 17*. Pp. 350-353; 2 figs. — Gr. G. Tocilescu, *Fouilles d'Akropolis*. Pp. 354-359; plan. — E. Maionica, *Antike Schreibrequisiten aus Aquileja*. Pp. 360-368; 3 figs. — F. Bulić, *Das Grabmal der Pomponia Vera in Salona*. Pp. 369-372; fig. — A. Schiff, *Inschriften aus Schedia (Unterägypten)*. Pp. 373-390. — C. F. Lehmann, *Zwei griechische Inschriften römischer Zeit aus Kleinasien und Kommagene*. Pp. 391-407; fig. — F. Studniczka, *Eine ligurische Porträtschrift*. Pp. 413-416; fig. — E. Loewy, *Zur Herkunft des Triumphbogens*. Pp. 417-422. — Ch. Huelsen, *Zu den römischen Ehrenbögen*. Pp. 423-430.] — T. Birt, *Laienurteil über bildende Kunst bei den Alten (Marburger akademische Reden No. 7)*. Marburg, 1903. Elwert. 46 pp. 8vo. — **Brunn-Arndt-Bruckmann**, *Griechische und römische Porträts*. Munich, 1902. 58. Lfg.: 571. Unbekannter tragischer Dichter. Rom, Vatikan. 572. Unbekannter Grieche. Neapel. 573. Unbekannter Grieche. Rom, Vatikan. 574. Demosthenes. Rom, Vatikan. 575-576. Alexander der Grosse(?). A. B. Kopenhagen, Glyptothek Ny Carlsberg. 577. Unbekannter Diadoch. Kopenhagen, Glyptothek Ny Carlsberg. 578-580. Unbekannter Grieche. A. B. C. Kopenhagen, Glyptothek Ny Carlsberg. — 59. Lfg.: 581-582. Unbekannter

Grieche. A. B. Rom, Capitol. 583-584. Unbekannter Grieche. A. B. Rom, Capitol. 585-586. Unbekannter Grieche. A. B. Rom, Vatikan. 587-588. Unbekannter Grieche. A. B. Rom, Konservatorenpalast. 589-590. Unbekannter Grieche. A. B. Rom, Villa Albani.)

L. Cabanès und Nass, *Poisons and sortilèges*. (1^{re} partie: Les poisons dans la mythologie; les poisons en Grèce; les poisons à Rome, etc.) Paris, 1903, Plon. 308 pp. 8vo. — **Collection d'antiquités grecques et romaines**. Vente du 11 au 14 Mai 1903. Paris, 1903. 93 pp.; 12 pls.; 57 figs. 4to. — **Collection Madalena**. Monnaies de l'Italie antique (italiotes-grecques-romaines). Vente à Paris le 7 mai 1903. 122 pp.; 9 pls. 8vo. — **E. T. Cook**, *A Popular Handbook to the Greek and Roman Antiquities in the British Museum*. London, 1903, Macmillan & Co. xxii, 794 pp.; 2 plans. 8vo. — **L. Curtius**, *Die antike Hermen*. Eine mythologisch-kunstgeschichtliche Studie. Dissertation. Munich, 1903, 28 pp.; 20 figs. 4to.

Di Falke, *Ellade e Roma. Quadro storico ed artistico dell' antichità classica*. Milan, 1903. 708 pp. 4to.

Festschrift der Albrecht-Ludwigs-Universität in Freiburg zum 50 jährigen Regierungsjubiläum S. K. H. des Grossherzogs Friedrich. Freiburg i. B., 1902, C. A. Wagner. vi, 299 pp. 4to. (Partial contents: O. Hense, *Die Modifizierung der Maske in der griechischen Tragödie*; E. Fabricius, *Ein Limesproblem*. Map.)

H. Gutscher, *Vor- und frühgeschichtliche Beziehungen Istriens und Dalmatiens zu Italien und Griechenland*. Graz, 1903, Jahresbericht des K. K. II. Staatsgymnasiums. 34 pp. 8vo.

Harvard Studies in Classical Philology, Vol. XIV, 1903. Greenough Memorial Volume. Cambridge, Mass., 1903. Published by the University. \$1.50. [Partial contents: K. E. Weston, *The Illustrated Terence Manuscripts*. Pp. 37-54; 96 pls. — J. C. Watson, *The Relation of the Scene-Headings to the Miniatures in Manuscripts of Terence*. Pp. 55-172.] — **W. Hensell**, *Modelle zur Veranschaulichung antiken Lebens für den Gebrauch an höheren Lehranstalten*. Gewandfigur zur Erläuterung der antiken Tracht.

- Frankfurt a. M., 1903, M. Diesterweg.
 — **Aus der Humboldt-Akademie.**
 Dem Generalsekretär Herrn Dr. Max Hirsch zu seinem 70. Geburtstage gewidmet von der Dozentenschaft. Berlin, 1902, Weidmannsche Buchh. xii, 284 pp.; 1 pl. 8vo. [Partial contents: A. Trendelenburg, "Mit Gott," Am Zeustempel in Olympia. Pp. 1-5. — S. Herrlich, Der Vesuv vor dem Ausbruche des Jahres 79. Pp. 57-67.]
- Mélanges Perrot, Recueil de Mémoires concernant l'archéologie classique, la littérature et l'histoire anciennes.** Paris, 1902, A. Fontemoing. 4to. [Partial contents: O. Benndorf, Grabstele von Arsada in Lykien. Pp. 1-3; fig. — V. Bérard, *Ἑγγα Νάξια*. Pp. 5-7. — G. Bloch, Hellènes et Doriens. Pp. 9-12. — A. Bouché-Leclercq, Les reclus du Sérapéum de Memphis. Pp. 17-24. — E. Bourguet, *Θυσία-Θυσίων*. Pp. 25-29. — R. Cagnat, Le castellum de Kherbet-Ksartir (Algérie). Pp. 37-39. — P. Cavvadias, Sur la guérison des malades au hiéron d'Épidaure. Pp. 41-43. — M. Collignon, Tête féminine provenant de Tralles (Musée du Louvre). Pp. 53-58; pl.; fig. — W. Dörpfeld, Das homerische Ithaka. Pp. 79-93. — P. Foucart, Le culte de Bendis en Attique. Pp. 95-102; 2 figs. — G. Fougères, Encore le lyciarque et l'archichéus des Augustes. Pp. 103-108. A. Furtwängler, Vom Zeus des Phidias. Pp. 109-120; fig. — P. Gardner, Aphrodite with the goat. Pp. 121-124; pl. — P. Gauckler, Centenarius, terme d'art militaire. Pp. 125-131. — H. Graillot, Médaille au type de Cybèle. Pp. 141-144; fig. — St. Gsell, Note sur deux antiquités puniques trouvées en Algérie. Pp. 151-153; 2 figs. — B. Haussoullier, Inscriptions grecques de l'Extrême-Orient Grec. Pp. 155-159. — W. Helbig, Le currus du roi romain. Pp. 167-172; 3 figs. — L. Heuzey, Quelques règles d'interprétation pour les figures assyriennes. Pp. 173-182. — Th. Homolle, Bronze grec de la première moitié du Ve siècle. Pp. 191-194; pl. — P. Jamot, Deux petits monuments relatifs au culte de Déméter en Béotie. Pp. 195-201; 2 figs. — A. Jouvin, Statuette en marbre de l'époque hellénistique. Pp. 203-206; fig. — H. Lechat, Le front de "l'Hermès" d'Olympie. Pp. 207-211. — E. Loewy, Zum Harpyienmonument. Pp. 223-225. — E. C. Lovatelli, L'isola Tiberina. Pp. 227-232; figs. — A. Michaelis, Hallenförmige Basiliken. Pp. 239-246. — E. Michon, Vase et bijoux d'argent trouvés près d'Aléria. Pp. 247-250; 2 figs. — A. S. Murray, An Athenian Alabastos. Pp. 251-254; 2 figs. — P. Paris, Bijou phénicien trouvé en Espagne. Pp. 255-258; 2 figs. — P. Perdrizet, De quelques monuments figurés du culte d'Athéna Ergané. Pp. 259-267; 5 figs. — E. Pottier, Petit vase archaïque à tête de femme. Pp. 269-276; pl. — S. Reinach, Recherches nouvelles sur la "Vénus" de Médicis. Pp. 285-290. — A. de Ridder, Vases archaïques à reliefs. Pp. 297-301; 2 figs. — C. Robert, Le poignard d'Achille chez Euripide et les chevaux d'Hector sur le vase de Charès. Pp. 303-366. — F. Studniczka, Über das Schauspielerrelief aus dem Piraeus. Pp. 307-316; 3 figs. — G. Tren, Zur Maenade des Skopas. Pp. 317-324; pl.; 6 figs. — P. Wolters, Loco sigilli. Pp. 333-340.] — **Musée du Louvre, Département des antiquités grecques et romaines. Acquisition de l'année 1901.** Paris, 1902. 19 pp. 8vo.
- L. Nass, see Cabanès.**
- W. Pecz, Lexikon des klassischen Altertums.** 1. Bd.: A-L. Budapest, 1902, Franklin. viii, 1142 pp.; 10 pls.; 514 figs. 8vo. [Hungarian.]
- **L. Pollak, Klassisch-antike Goldschmiedearbeiten im Besitze Sr. Excellenz A. J. von Nelidow, k. russ. Botschafter in Rom.** Leipsic, 1903, K. W. Hiersemann. x, 197 pp.; 20 pls.; 37 figs. 4to.
- S. Reinach, Recueil de têtes antiques idéales ou idéalisées.** Paris, 1903. vii, 230 pp.; 276 pls.; 18 figs. 8vo.
- **W. H. Roscher, Ausführliches Lexikon der griechischen u. römischen Mythologie.** 47. Lieferung: Paris-Peirithoos. 48. Lfg.: Peirithoos-Pentrales. Col. 1761-1920; 38 figs. 49.-50. Lfg.: Penia-Phalaritis. Col. 1921-2240; 39 figs. Leipsic, 1903, B. G. Teubner. 8vo.
- R. P. Spiers, see Anderson.**
- W. Windisch, De Perseo eiusque familia inter astra collocatis.** Leipsic, 1902, Dissertation. 76 pp. 8vo.
- E. Ziebarth, Eine Inschriftenhandschrift der Hamburger Stadtbibliothek.** Hamburg, 1903, Programm des Wilhelmsgymn. 17 pp. 4to.

GREEK

(Including also titles of works relating to pre-Hellenic inhabitants of Greece and to kindred peoples, and to monuments of Greek art wherever found.)

I. GENERAL AND MISCELLANEOUS

- C. Albers**, De diis in locis editis cultis apud Graecos. Leyden, 1901, Dissertation. 100 pp. 8vo. — **C. Ausfeld**, De Graecorum precatationibus quaestiones. Giessener Diss. Leipzig, 1903, B. G. Teubner.
- V. Bérard**, Les Phéniciens et l'Odyssée. Tome II. Paris, 1903, A. Colin. viii, 630 pp.; map; 143 figs. 4to. — **J. Burckhardt**, Griechische Kulturgeschichte. Hrsg. v. J. Oeri. Vol. 4. Berlin and Stuttgart, 1902, W. Spemann. iv, 658 pp. 8vo. — **C. G. Burkitt**, see **Weissenborn**. — **Burlington Fine Arts Club**, Exhibition of Ancient Greek Art (Preface signed by Eugénie Strong). London, 1903. xviii, 265 pp. 4to.
- E. Capps**, The Introduction of Comedy into the City Dionysia. (The University of Chicago Decennial Publications. Ser. I, Vol. VI.) Chicago, 1903. 30 pp. 4to. — **Cretan Exploration Fund**, Report of Excavations of the Palace of Knossos, Campaign of 1902. — Report on Excavations at Palaeokastro, 1902.
- A. Döring**, Eine Frühlingsreise in Griechenland. Frankfurt a. M., 1903. 199 pp.; 9 pls. 8vo. — **H. Dragendorff**, see **F. Hiller von Gärtringen**. — **H. Draheim**, Die Ithaka-Frage. Programme. Berlin, 1903.
- J. Estève**, Les innovations musicales dans la tragédie grecque à l'époque d'Euripide. Nîmes, 1902. xiii, 308 pp. 8vo.
- Festschrift des Stadtgymnasiums zu Halle a. S.** zur Begrüssung der 47. Versammlung deutscher Philologen und Schulmänner in Halle. Halle a. S., 1903, M. Niemeyer. [Contains: **B. Bräuning**, Über das Gebiet der aristotelischen Poetik. Pp. 29–59. — **Fr. Kähler**, Forschungen zu Pytheas' Nordlandsreisen. Pp. 99–156.] — **E. Fischer**, Archäologische Erinnerungen an eine Studienreise nach Griechenland. II. Programm des Johannes-Gymnasiums. Breslau, 1903. 15 pp.; 4 pls. 4to.
- B. Graef**, see **Müller-Wieseler**.
- K. Hachtmann**, Die Akropolis von Athen im Zeitalter des Perikles (Gymnasial-Bibliothek, Heft 35). Gütersloh, 1903, C. Bertelsmann. viii, 164 pp.; 42 figs. 8vo. — **W. van de Hagt**, De urbe Agrigentorum quae innouerunt. Utrechter Diss. inaug. Rotterdam, 1903. 88 pp.; map. 8vo. — **J. E. Harrison**, Prolegomena to the Greek Religion. Cambridge, 1903, University Press. xxii, 680 pp.; 179 figs. 8vo. — **D. Heubach**, Das Kind in der griechischen Kunst. Heidelberger Diss. Wiesbaden, 1903, R. Bechtold & Co. 69 pp.; pl. 8vo. — **F. Hiller von Gärtringen**, Thera. Untersuchungen, Vermessungen und Ausgrabungen in den Jahren 1895–1902. 2. Bd.: H. Dragendorff, Theraische Gräber. Berlin, 1903, G. Reimer. ix, 328 pp.; 5 pls.; 521 figs. 4to. — **G. Huch**, Die Organisation der öffentlichen Arbeit in griechischen Altertume. 1. Teil. Leipziger Diss. 1901. Frankenstein, 1903, F. Huch. 103 pp. 8vo.
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- A. Δαμπρόπουλος**, Εὑρετήριον τῆς ἀρχαιολογικῆς ἐφημερίδος τῆς τρίτου περιόδου. Τόμος πρῶτος περιλαμβάνων τὰ ἔτη 1883–1887. Ἐν Ἀθήναις, 1902. vii pp.; 548 coll. 4to. — **W. Lermann**, Einige Athenadarstellungen in der griechischen Kunst. Programm des Maximilians-gymnasium. Munich, 1902. 74 pp. 8vo. — **A. Rutgers van der Loeff**, De ludis Eleusiniis. Dissertation. Leyden, 1903. 143 pp. 8vo.
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- Gütersloh, 1903, C. Bertelsmann. 53 pp.; map; 9 figs. — **C. O. Müller** and **F. Wieseler**, Antike Denkmäler zur griechischen Götterlehre. 4. umgearb. u. verm. Ausgabe begonnen von K. Wernicke, fortgeführt von B. Graef. Denkmäler der alten Kunst. Teil II. Liefg. III: Apollon. Text. ii, pp. 265–378; pls. xxi–xxx. 4to. Leipsic, 1903, Dieterichsche Verlagsbuchh. 8vo.
- B. Niese**, Geschichte der griechischen und makedonischen Staaten seit der Schlacht bei Chaeronea. 3. Teil: Von 188 bis 120 v. Chr. (Handbücher der alten Geschichte. II. Serie, 1. Abt.). Gotha, 1903, P. A. Perthes. x, 467 pp. 8vo.
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- H. Schmidt**, Königliche Museen zu Berlin, Heinrich Schliemann's Sammlung Trojanischer Altertümer. Hrsg. v. d. General-Verwaltung. Berlin, 1902, G. Reimer. xx, 354 pp.; 11 pls.; 1176 figs. 4to. — **G. C. Scoggin**, see **Weissenborn**. — **C. v. Speth-Sülzburg**, Auf klassischem Boden. Wanderungen durch den Peloponnes und in Kleinasien. Munich, 1903, J. Roth. vii, 258 pp. 8vo. — **E. Strong**, see **Burlington Fine Arts Club**.
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- C. Wachsmuth**, Athen. (Sonderdruck aus Pauly-Wissowas Real-Encyclopädie). Stuttgart, 1903, J. B. Metzler. Plan. — **E. Weissenborn**, Homeric Life, translated and adapted to the Needs of American Students by G. C. Scoggin and C. G. Burkitt. Vanderbilt Oriental Series, edited by H. C. Tolman and J. H. Stevenson. New York, 1903, American Book Co. 128 pp.; ill. 8vo.

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- R. C. Flickinger**, The Meaning of *ἐπι τῆς σκηνῆς* in Writers of the Fourth Century (Decennial Publications of the University of Chicago, Bd. VI). Chicago, 1902. 16 pp. 4to.
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- Inscriptiones graecae**. Consilio et auctoritate Academiae litterarum regiae Borussicae editae. Vol. XII: Inscriptiones insularum maris Aegaei praeter Delum. Fasciculi V pars prior: Inscriptiones Cycladum praeter Tenum ed. F. Hiller de Gärtringen. Berlin, 1903, G. Reimer. iii, 227 pp. 4to. — **Inscriptiones Orientis graeci selectae**. Supplementum sylloges inscriptionum graecarum ed. W. Dittenberger. Vol. I. Leipsic, 1903, S. Hirzel. v, 658 pp. 8vo.
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- J. Déchelette**, L'oppidum de Bibracte. Guide du touriste et de l'archéologue au Mont Beuvray et au Musée de l'Hôtel Rolin. Paris, 1903. A. Picard & Son. 77 pp.; map; 27 figs. 8vo. — **Description de l'Afrique du Nord**. Atlas archéologique de la Tunisie. Edition spéciale des cartes topographiques publiées par le ministère de la guerre accompagnée d'un texte explicatif par E. Babelon, R. Cagnat, S. Reinach. 8^e livraison. Paris, 1902, E. Leroux. 6 Bl.; Pl. no. XIX, XXVI, XVIII, XXVII; 2 figs. Folio. — **E. M. O. Dognée**, Un officier d'armée de Varus. Brussels, 1902, Lebeque. 225 pp. 8vo.
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- Argnani**, Ceramiche e maioliche arcaiche faentine. Faenza, 1903, J. Montanari. 40 pp.; 6 figs.; 22 pls. 4to. — **Atti del II^o** congresso internazionale di archeologia cristiana tenuto in Roma nell'aprile 1900. Dissertazioni lette o presentate e resoconto di tutte le sedute. Roma, 1902, Spithöver. vi, 445 pp.; many illus. — **A. Avena**, Monumenti dell'Italia Meridionale. Official report to the Italian Ministry of Public Instructions, 1891-1901. Rome, 1902, Officina poligrafica. \$4.00. — **J. C. Ayer**, The Rise and Development of Christian Architecture. Milwaukee, 1902, Young Churchman Co. 3, 64 pp. 8vo. \$1.50.
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- Burlington Magazine** for Connoisseurs. Illustrated and published monthly. Vol. I, No. 1, March, 1903. London, 1902, The Saville Publishing Co. 144 pp.; fig.; 37 pls. 4to.
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- viii, 227 pp.; fig. Folio. — **Miscellanea d'Arte**. Rivista mensile di Storia dell'Arte medievale e moderna, diretta da I. B. Supino. Vol. I, no. 1. January, 1903. Florence, 1903, Martelli. 20 pp.; fig.; plate. 8vo. — **Moderner Cicerone**. Rom. II: Neuere Kunst seit Beginn der Renaissance, von O. Harnack. vii, 260 pp.; 159 figs., 4to. — Florenz. I: Die Gemälde-Galerien der Uffizien und des Palazzo Pitti, von P. Schubring. 152 pp.; 100 figs. II: Bargello, Domopera, Akademie, Kleinere Sammlungen, von P. Schubring. 198 pp.; 134 figs. Stuttgart, Berlin, Leipsic, 1902, Union Deutsche Verlagsgesellschaft. Sm. 8vo. — **E. Molinier**, Histoire générale des arts appliqués à l'industrie, du Ve à la fin du XVIII^e siècle. IV. L'Orfèvrerie religieuse et civile. Paris, 1903, Levy, 301 pp. Folio. — **W. Morris**, Architecture, Industry, and Wealth. Collected Papers. London, 1903, Longmans. 278 pp. 8vo. \$1.50. — **R. Muther**, Geschichte der englischen Malerei. Berlin, 1903, S. Fischer. 400 pp.; 153 figs. 8vo.
- National Gallery zu London**, Die Meisterwerke der. Introduction by K. Voll. Munich, 1902, Hanfstaengl. xx, 210 pp.; 222 pls. 8vo.
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- E. Schmitt**: Handbuch der Architektur. II Teil, 4. Band: Die romanische und die gotische Baukunst. 4. Heft: Einzelheiten des Kirchenbaues von Max Hosak. Stuttgart, 1903, Bergsträsser Verlagsbuchhandlung (A. Kröner). 376 pp.; 511 figs.; 12 pl. — **P. Schubring**, Pisa. Leipsic, 1902, E. A. Seeman. vii, 182 pp.; fig. 8vo. \$1.00. — See **Moderner Cicerone**. — **E. Singleton**, The Furniture of Our Forefathers. With Critical Descriptions of the plates by Russell Sturgis. (New ed.). New York, 1903, Doubleday, Page & Co. 7 x 10; 664 pp.; 450 ill.; 2 vols. \$10.00. — **L. Solon**, A History and Descriptions of the Old French Faïence. London, 1903, Cassell & Co. xii, 172 pp.; 58 pls. 4to. — **R. Sturgis**, see **E. Singleton**. — **Stuttgart**, Verzeichniss d. Gemäldesammlung im Kgl. Museum der bild. Künste. (Introduction by K. Lange.) Stuttgart, 1903, Spemann. lvi, 208 pp. 8vo. — **I. B. Supino**, see **Miscellanea d'Arte**.
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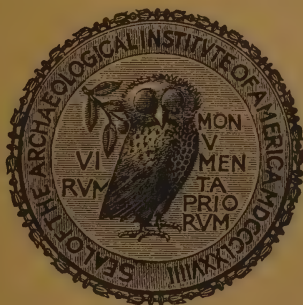
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- XII. Fragment of a Treasure List found in the Acropolis Wall at Athens.
- XIII. Head of Dionysus from Corinth.

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 Η Κ Ε Ν :: Χ Ρ Υ Ξ Ι Τ Ι Ξ Λ Ι Θ Ο Ξ Ε Γ Ι Κ Ι Ο Ν Ο Ξ Ξ Υ /
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Ω 6

	Δ Γ	
· Γ Γ :: Δ Ο Η Ι	Ε Ι Ο	10
Ι Ν Ο Χ Ο Η < Τ	Ξ Α	
\ Λ Λ Ξ Ι Δ	Μ Ε Ι	
Ρ Ο Ν Ο Ο Υ	-	
Η Ξ Κ Ε Φ Λ Η Ξ		
Δ Ι Ω Λ Ι	Ω Δ	15
Α Ξ Ι Δ Η Ρ Λ	Λ Ξ	
Ι Γ Ε Ν Ο Ξ Α Ρ Χ Ο		
Ο Ι Δ Ι Ο Ν	Λ Ε Φ	
Β Ω Τ Ι Ω Ι Ι' Α	Α	
Ι Ο Ν Ε Λ		20
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(C.I.A. II, 2, 684.)

American School
of Classical Studies
at Athens

FRAGMENT OF A TREASURE LIST FOUND IN THE
ACROPOLIS WALL OF ATHENS

[PLATE XII]

IN the years 1896-98, during my residence in Athens as a Fellow of the American School of Classical Studies, it was my good fortune to discover nineteen Greek inscriptions of varying length and importance, which had, up to that time, escaped the attention of archaeologists, owing to their having been built into the outer face of the Acropolis wall in the course of various Roman or Turkish repairs. By dint of rock climbing and by the use of a rope ladder, lent me by the kindness of Dr. Wolters of the German School, I succeeded in getting very good "squeezes" of all of these inscriptions; and with the consent of the ephor-general of antiquities, Mr. Kabbadias, I even removed from a ruinous section of the wall two of the smaller stones, which had become dangerously loose, so that I was enabled to subject them to very careful examination and study. Both stones contain fragments of treasure lists, and are now deposited among the other inscriptions of this class in the Epigraphical Museum of Athens.

The better preserved and more easily restored of the two I shall discuss in this paper. The inscription is cut on a tablet of Pentelic marble 0.16 m. in thickness. On all sides except the left the stone has been broken away, so that it leaves a somewhat irregular parallelogram of about 0.25 m. in height and 0.22 m. in breadth. At the top a line seems purposely to have been obliterated by the scribe or by some early corrector.

For the punctuation marks (: and ::), see Meisterhans, *Grammatik* (3d ed., 1900), p. 12.

The letters measure 0.005 m. to 0.006 m. in height and are cut *στοιχηδόν*, though not with the geometrical accuracy of many inscriptions of the same period as this. The letters are in general much obscured by being partially filled with a lime deposit from the water that has long trickled over them, and portions of the inscription could only be deciphered by the use of a sugar solution, which, as it crystallized in the very slight depressions still remaining in the surface of the stone, betrayed to a patient scrutiny the words that had become dim. While the font of type used in PLATE XII represents sufficiently well the forms of the letters in this inscription, it should be remarked that they are in general decidedly quadrate. The following characteristic forms occur, reproduced in their actual size :

Α Δ Ε Κ Μ Ν Ρ Σ Φ Ω

TRANSCRIPTION

Imperfect and obscure letters are bracketed [].

- [τάδε ἀργυρᾶ:: πίναξ ἀργυροῦς:: σ]
 [ταθμὸν ΧΧΗΔΔΓΓΓΓΓ:: πίναξ ἕτερος σταθμὸν..... ΓΓΓΓΓ:: πίναξ ἕτερο]
- 1 ..[σ]ταθμὸν ΓΓΗΗΔΔΓΓΓΓΓΓΓΓΓΓ:: χερνιβ[εἶον ἀργυροῦν:: σταθμὸν ΧΓΓ:: χερνιβ-]
 - 2 εἶον ἕτερον ἀργυροῦν:: στ[α]θμὸν ΓΓ[ΗΗΗΗΔΔΔΔΔ:: οἶνοχόαι ἀργυρὰι τρεῖς]
 - 3 σταθ[μ]ὸν ΧΗΗΗΗΓΔΔΔΔΓΓΓΓΓ:: ο[ι]νοχόη [ἀργυρᾶ:: σταθμὸν ΓΓΗΓΓΓΓΓ:: φιάλη ἀργ-]
 - 4 νρ[ᾶ]:: [σ]ταθμὸν ΗΓ:: ἑτέρα φ[ι]άλη ἀρ[γυρᾶ].....:: σταθ-]
 - 5 μὸν: Η:: ἐγ κιβωτίῳ χρυσίον ἀπὸ τ[οῦ] κανοῦ ἵνα τὰ ἐλεφάντινα ζῶδια:: σ]
 - 6 [τ]αθμὸν ΔΔΔΔΔΓΓΓΓΓ:: [κ]ρατῆρ χρυσοῦς [:: σταθμὸν ΧΧΓΓΓΔΔΔΔΔΓΓΓΓΓΓΓΓΓΓ:: τοῦ Ἀπόλλ]ω-
 - 7 νος φιάλη ἀργυρᾶ:: σταθμὸν ΓΓΗΗΗΗ[ΗΔΔΔΔ:: τῆς Ἀθηνᾶς ἑδρία χρυσῇ:: σ]τα-

- 8 θμὸν ΔΔΔΔΓ††††|||:: [χ]ρ[υ]σίον ἀπὸ τ[ῶν ἀκρωτηρίων:: στα-
θμὸν....:: σ]τα-
- 9 θμ[ί]α χαλκᾶ Δ||:: δοκιμέια:: λείαι χ[ρ]υσαῖ ἀριθμὸς ΔΔ (or ΓV)::
σταθμὸν (ΓVΔΔ)ΔΓ or ΓVΔΔΔ)ΔΓ)
- 10 ||||:: ἔ[τ]εραι λείαι χρυ[σ]αῖ: ΔΔ|||:: στα[θμὸν τούτων ΔΔΔΔ·
Γ††††||] δοκιμεῖ-
- 11 ον τῆς οἰνοχόης [τ]οῖν θεοῖν χρυσίου Ις:: δοκιμεῖον τῆς ο]ινοχόης τῆς
ἸΑθ-
- 12 ηγαίας χρυσίου: ΙςΕ:: δοκιμεῖον τοῦ χρ[υ]σίου τοῦ ἐς τὰς φιά[λας Ις::
δοκιμεῖ-
- 13 ον τοῦ χρυσίου τοῦ ἐπὶ τὰ θυματήρια: ΙςΕ:: δοκιμεῖον τοῦ θ]ρόνου
οὐκ ἐπεγέ-
- 14 γραπτο οὐδέν Ις:: [σ]τέφανος χρυσοῦς δ[ν ἡ Νίκη ἔχει ἐπὶ τ]ῆς κεφα-
λῆς ἡ Ἑ[ῖ] (sic)
- 15 πὶ τῆς χειρὸς[s] τοῦ ἀγάλματος τοῦ χρυσοῦ [ἄστατος:: σφραγι]δίω
λιθίνω δύ-
- 16 ο τὸ μὲν χρυσοῦν ἔχον δακτύλιον τὸ δὲ [ἀργυροῦν:: μάχαιρ]α σιδηρᾶ
ἐλεφ-
- 17 ἀντινον κολεὸν ἔχουσα ταύτ[η]ν ἡ βουλὴ [ἀνέθηκεν ἡ ἐπ' Ἀντ]ιγένους
ἄρχον-
- 18 [τ]ος Μεληγάδου παρ[ακ]αταθήκη:: ἀργύρι[ον ἐπίτηκτον:: β]οῖδιον
ἐλεφά-
- 19 ντινον ὃ Σμικύθη ἀ[νέ]θηκεν:: στατήρ[ες κίβδηλοι ἐγ κ]ι βωτίω παρὰ Λ-
20 άκωνος σεσημῖασμένοι:: ὄνυξ [μ]έγας κ[αταεργός:: παλλάδ]ιον ἐλε-
[φάντι-]
- 21 νο[ν] ἐπύχρυσον καὶ ἀσπὶς ἐπύχρυσος ὃ Ἀρχίας ἐμ Πειρα]εῖ ο[ικῶν
ἀνέθ-]
- 22 ηκεν:: χρυσῖτις λίθος ἐπὶ κίονος ξυ[λίνου:: κυνῇ χαλκῇ:: γοργονεῖον]
- 23 χρυσοῦν ὑπ[άρ]γυρον ἐπίτη[κ]τον ἀπὸ [τῆς ἀσπίδος τῆς ἀπὸ τοῦ ἔδους
ληφθέ-]
- 24 ν:: γραμματεῖον παρὰ τῆς βουλῆς τῆ[s ἐξ Ἀρείου πάγου σεσημασμέ-
νον:: θή-]
- 25 ραιον: Ι παλαιόν:: ἕτερον [νέον θήραιον::]
- 26 ἄρχοντος:: θρόνοι με[γάλοι ||| οὐχ ὑγίεις, ἀνακλίσεις ἔχοντες ἡλεφαντ-]
- 27 [ωμένες ἐ]τερος θρ[όνος ἀνάκλισιν ἔχων]

I shall first make whatever comments seem necessary upon the text as deciphered and restored, and shall then pass on to a brief consideration of the probable date of the inscription and

² Koehler failed to identify these *οἰροχῶται* with the three mentioned in *C.I.A.* II, 2, 652, A, l. 30; 667, l. 22; 711, l. 7, and so supplied [ἐπιδά] here and in *C.I.A.* II, 2, 677, II, l. 38. Eustratiades, who first edited the latter inscription, fancied, wrongly, that he could distinguish the first and last letters of ἐ[πιδά].

The weight of the second *χερμιβεῖον* is again given as 940 drachmae. (Cf. also *C.I.A.* II, 2, 681, l. 29.) *C.I.A.* II, 2, 681 and 711 afford little new light except that they give the number of *οἶνοχόαι* as three. From the former we learn that when that stone was inscribed both the *χερμιβεῖα* and the *πίνακες* had become injured (*οὐχ ὑγιή*) and in the latter, as also in *C.I.A.* II, 2, 677 and 680, we see that a vacant space immediately preceded the list of these eleven utensils.

In *C.I.A.* II, 2, 652, A, l. 30, and 667, l. 22, the *οἶνοχόαι* are again stated to have been three in number, and in the latter the word is spelled *τρῆς*, as I have myself restored it, the more usual spelling in these lists being *τρεις*. (Cf. also *C.I.A.* II, 2, 660, l. 32, restored.) From *C.I.A.* II, 2, 668, l. 3 is derived the information that the single *οἶνοχόη* weighed 652 drachmae (ϞΗΓϞϞ). (Cf. *C.I.A.* II, 2, 667, l. 23 restored.)

When we see that by combining all these statements we can exactly supply what is lacking in the first three lines of the new inscription, we cannot help feeling absolutely certain of the correctness of these emendations, and can safely prefix the list of the three *πίνακες* as given in *C.I.A.* II, 2, 677, II, ll. 39-41.

By the discovery of this new treasure list confirmation is afforded of the emendations already proposed by others in *C.I.A.* II, 2, 652, A, l. 30; 660, l. 32; 667, l. 22, and especially of that of Boeckh in 668, ll. 1-3. Furthermore, we are now able to supply, in *C.I.A.* II, 2, 677, II, ll. 38 sqq.; 680, ll. 5-14; 681, ll. 23-33; 711, ll. 6-13, the weight of the third *πίναξ* and of the single *οἶνοχόη*. *C.I.A.* II, 2, 681, ll. 24-33, and 711, ll. 6-7, may also be emended in several particulars by the aid of the new inscription.

Though I feel sure that the two *φιάλαι* of ll. 3 and 4 are those that are listed together as *δύο φιάλαι* in the four inscriptions cited above, I can propose nothing at all convincing with regard to the space left vacant in l. 4. Perhaps something like *ἦν ἀνέθηκεν* originally stood there. (Cf. *C.I.A.* II, 2, 654, b, l. 2, *φιάλη ἀργυρᾷ ἦν Ἀριστόλα ἀνέθηκεν*, which is, however, too short by one letter to fill the blank satisfactorily.)

LINE 5. — Next we find listed certain gold (*χρυσίον*), preserved in a box, but originally coming from some other source (*ἀπὸ τοῦ.....*). This we see mentioned in *C.I.A.* II, 2, 673, l. 26, *χρυσίον ἀ[π]ὸ τοῦ κανοῦ ἵνα τὰ [ἐλεφάντινα ζῶα(?)]*, though it is not there stated that it was kept *ἐν κιβωτίῳ*. So, too, though more corruptly in *C.I.A.* II, 2, 678, A, I, l. 21, which may, however, be quite fully restored and corrected from the previous inscription and from this newly found fragment. It reads, as given in the *Corpus*, thus: *[ἐν] κιβωτίῳ ἀπὸ [..... | ἐλεφ]άντιναι δια..... ΔΔΔΔ*, the weight thus agreeing, so far as it goes, with the new inscription. Eustratiades seems to have made a somewhat hasty copy, for what he reads as Δ (*δια*) is an ω, and his α is certainly to be read as a Δ.¹ From these two passages, aided as to the spelling *ζῶδια* by *C.I.A.* II, 2, 676, l. 46 (cited in footnote), we can restore l. 5 of our inscription with absolute certainty.

LINE 6. — The *κρατῆρ χρυσοῦς* of the next line is probably the one mentioned in *C.I.A.* II, 2, 668, l. 12 *κρατῆρ χρυσοῦς ὁ μικρός, σταθμὸν ΧΧΓΓΔΓΓΓΓΓΓΓ* (cf. also *C.I.A.* II, 2, 669, l. 7, where the reference is, however, more fragmentary); at any rate its weight exactly fills the space left vacant between this and the next object, *τοῦ Ἀπόλλωνος φιάλη ἀργυρά(?)*. By reading *ἐπὶ Χίωνος* (365–364 B.C.), which is supported by a very faint vertical line before the ω at the end of l. 6, we can insert the words *ὁ μικρός*, using the abbreviation ΞΤΑ for *σταθμὸν*. In this case we should be forced to omit the sign of punctuation before *σταθμὸν*, so that, on the whole, I think the reading which omits *ὁ μικρός* and gives *Ἀπόλλωνος* is to be preferred. (For the use of *φιάλη ἐπὶ Χίωνος*, cf. *C.I.A.* II, 2, 682, l. 9.)

In the next line (7) we may perhaps restore *Ἀρτέμιδος* (cf. *C.I.A.* II, 2, 683, ll. 2, 3, 9) or *τῆς Ἀθηνᾶς* (cf. *C.I.A.* II, 2, 701, l. 1, ll. 43–49) *ὑδρία χρυσῆ*. An *ὑδρία(?)* weighing, as here,

¹ This basket is further mentioned separately in the same inscription (*C.I.A.* II, 2, 678, A, II, l. 9) *κανοῦν ἵνα τὰ [ἐ]λ[ε]φ[άντιν]α [ἰ]ῶ[ια] ἄστατον*. (So, too, *C.I.A.* II, 2, 701, I, l. 80, and 676, l. 45 *κανοῦν χαλκοῦν ἵνα τὰ ἐλεφάντινα] ζῶδ[ια].*)

49 drachmae, 3 obols, is mentioned in *C.I.A.* II, 2, 716, l. 16. The restorations in these two lines are by far the most uncertain of any in the entire inscription.

The χρυσίον ἀπὸ τῶν ἀκρωτηρίων σταθμὸν.... of l. 8 is most fully described in *C.I.A.* II, 2, 698, Col. II, l. 34: ἕτερον χρυσίον ἐ[πίτηκτον ἀπὸ τῶν] ἀκρωτηρίων στ[αθμὸν.....]. Cf., however, *C.I.A.* II, 2, 677; II, l. 21, and 738, l. 7.

The next objects, σταθμία χαλκᾶ ΔII are spoken of some seven times in these lists: most fully in *C.I.A.* II, 2, 667, l. 41, [στα]θμία χαλκᾶ ΔII ἃ ὁ δῆμος σηκῶσαι ἐψ[ηφίσατο]; less fully in *C.I.A.* II, 2, 652, A, l. 46, and 673, l. 27; and, more or less restored, in *C.I.A.* II, 2, 649, l. 23; 658, l. 7; 661, l. 3. From *C.I.A.* II, 2, 677, II, l. 28, we learn that certain σταθμία were kept in a box, [σταθ]μία τὰ ἐν τῷ [κιβωτίῳ], serving perhaps as standard weights, for in the Ὀνομαστικόν of Julius Pollux (X, 126) we read that even a hundred years later σταθμία χαλκᾶ were still among the ἀναθήματα: προσθήσεις δὲ τοῦτοις καὶ σταθμὰ καὶ τάλαντα, ζυγόν, πλάστιγγας, τρυάνην. καὶ σταθμία δὲ χαλκᾶ ἐν τῇ ἐπ' Ἀλκιβιάδου ἀρχοντος (256–255 B.C.) ἀναγραφῇ τῶν ἐν ἀκροπόλει ἀναθημάτων ἀναγέγραπται.

LINES 9, 10. — Δοκιμεία and λείαι χρυσαῖ appear in conjunction in *C.I.A.* II, 2, 698, II, l. 26: λείαι χρυσαῖ, δοκιμεία, [ἀ]ριθ[μὸς] (i.e. space for from three to nine letters) σταθμὸν ΓΔΔΔΓΓΓΓΓΓ. The weight here given does not agree exactly with that in the new fragment ΓΔΔΔΓΓΓΓΓ, but we may suppose the number to have been increased by one or two, and the weight by four drachmae, by the year 350–349 B.C., which is the date of the above list. It would also be quite possible to read ἀριθμὸς Γ:: σταθμὸν ΓΔΔΔΔΓΓΓΓΓ, thus making the proportion between the number and weight agree better with that in the case of the ἕτεραι λείαι of the next line. We should then suppose that the number and weight were reduced before the year 350–349 B.C., the former from Γ (50) to ΔΔΔΔΓΓ (47) perhaps, and the latter from ΓΔΔΔΔΓΓΓΓΓ (95+) to ΓΔΔΔΓΓΓΓΓΓΓΓ (89+) drachmae.

The ἑτεραι λείαι χρυσαῖ ΔΔΙΙΙ of l. 10 may be the twenty-three objects named at the end of *C.I.A.* II, 2, 667; for by reading σταθμὸν τόπων (Meisterhans, 49), which is a very common formula, especially in the mention of a second lot of utensils, we leave a vacant space which is exactly filled by the weight there mentioned (ΔΔΔΔΓΓΓΓ). These λείαι χρυσαῖ are probably show specimens of the weights used in the ancient loom in order to hold the separate threads of the warp tight. They may even have been used in weaving the peplos for the Panathenaic festival, and would in any case be ἀναθήματα appropriate to the goddess of household arts. They seem to have weighed decidedly more than the δοκιμεῖα, listed below, and to have been frequently listed with them as here. For a discussion of these λείαι, cf. J. G. Schneider, *Scriptores rei rusticae*, IV, p. 380, and especially Blümner, *Technologie und Terminologie der Gewerbe und Künste bei Griechen und Römern*, I, pp. 128 and 359. Evidence for the dedication of λείαι is to be found in the fact that rather an elaborate weight of this nature, with paintings in the red-figured style, was found in 1877 (see *B.C.H.* for that year, p. 53) near the Erechtheum, in close proximity to a vase dedicated to Athena. The cone measures 0.03 m. in height, and is ornamented with an owl on one side and a female figure (?) on the other. Pottier and Reinach, *La Nécropole de Myrina*, p. 252, reach the conclusion that such weights were frequently dedicated to goddesses. Elaborate specimens, which were found by Schliemann at Hissarlik, would probably come under this category. At Elatea one of these weights was found bearing the inscription Θεωρίς Ἀθανᾶ. Large numbers of a ruder sort are often found in the course of excavations. They are in the form of rough cones made of pottery, with the apex pierced to receive the thread of the warp. The fine thread of the goddess's πέπλος would probably not require weights heavier than two drachmae.

There may perhaps be a slight doubt about the use of these cones, but the view I have given is now generally accepted. The inscriptional use of the word λείαι needs emphasis.

With line 11 we reach a point where for several lines restorations can be made with much greater certainty because of the existence of the above-mentioned fragment, already published in *C.I.A.* II, 2, 684. This fragment, as emended by Koehler, reads as follows :

- Line 1 (10). δοκι[μ]εῖο[ν
 2. ο]ἰνοχόης τ[ῆ]ς ἀ[πὸ... (This we now see should
 be read οἰνοχόης τῆς Ἀθηναίας.)
 3. λας ι^c. (τριημιοβόλιον) δ[οκι]μεῖ[ον
 4. ἀπὸ θ]ρόνου [ο]ὕ[κ ἐντελ —? (The reading
 should probably be δοκιμεῖον τοῦ θρόνου, οὐκ
 ἐπεγέγραπτο οὐδέν.)
 5. τ]ῆς κεφα[λ]ῆς
 6 (15). ἐνφ]δίω [ἀργυρ]ῶ δ[ύο (This should certainly
 be σφραγιδίω λιθίνω δύο.)
 7. ... α σιδηρᾶ
 8. Ναυσ]ιγένους ἄρχο[ντος (Ol. 103, 1). (This must
 with equal certainty be Ἀντιγένους ἄρχοντος, as
 we shall see below.)
 9. β]οῦδιον [ἐ]λεφ[άντινον
 10. ἐν κ]ιβωτίῳ πα[ρ]α[καταθήκη? (Here we must
 read ἐν κιβωτίῳ παρὰ Λάκωνος σεσημασμένοι.)
 11 (20). παλλάδ]ιον ἐλ[εφάντινον.

I have, somewhat prematurely perhaps, entered upon this discussion of the readings and restorations of the *Corpus*, but it seemed to me best to state at once the points upon which the new inscription casts light, and to leave the proof of the correctness of my own readings to be presented below.

In supplying ll. 11-13 this fragment came especially to my assistance, for it provided me in very full form with the terminations of these lines. When we read δοκιμεῖον τῆς οἰνοχόης τοῖν θεοῖν χρυσίου ι^c (= τρία ἡμιοβόλια) and then see that the words δοκιμεῖον τῆς exactly fill the break in l. 11, we cannot doubt that the same formula was used in the case of Athena as in that of the two goddesses, namely : δοκιμεῖον τῆς

οἶνοχόης τῆς Ἀθηναίας χρυσίου ΙΕ. The sign that follows the $1\frac{1}{2}$ obols would stand for the word *τεταρτημόριον*, thus making the weight of this *δοκιμείον* $1\frac{3}{4}$ obols instead of $1\frac{1}{2}$. The usual character for this fourth part of an obol is simply the letter Τ. The sign here used I have never seen elsewhere. It will be noticed that in the case of these two *δοκιμεία*, as well as in that of the three following, the word *σταθμόν* does not immediately precede the mention of the weight. Furthermore, in the case of the first two, the reservation of the word *χρυσίου* till the end seems to me to be against taking it with *δοκιμείον* as meaning 'a specimen of the gold of the οἶνοχόη, etc.: weight, $1\frac{1}{2}$ obols,' though this is certainly the construction of *δοκιμείον τοῦ χρυσίου* in the two following cases. I incline rather to the view that *χρυσίου Ι* ($1\frac{1}{2}$ obols of gold) is to be regarded as an appositive of the words *δοκιμείον τῆς οἶνοχόης*; i.e. — a testing specimen from the οἶνοχόη of Athena — $1\frac{3}{4}$ obols of gold. Against this view is, however, the fact that the word *χρυσίου*, even if it is to be construed with *δοκιμείον*, could not well have any other position than that here given it. A Greek could hardly have said, *δοκιμείον τοῦ χρυσίου τῆς οἶνοχόης τῆς Ἀθηναίας*, though he might possibly have said *δοκιμείον τοῦ χρυσίου τοῦ τῆς οἶνοχόης*. This would have been far more awkward, however, than *δοκ. τ. χρ. τοῦ ἐπὶ τὰ θυμ.*

LINE 12. — In the next line, after completing the word *χρυσίου*, we have space for nine and a half letters before the termination *ΛΑΞ*. These may have given a reading something like, *δοκιμείον τοῦ χρ[υσίου τοῦ τῆς Δεξιλλας]*,¹ but it is to my mind preferable to supply the words *τοῦ ἐς τὰς φιάλας*, thus making this *δοκιμείον* more like the one that immediately follows: *δοκιμείον τοῦ χρυσίου τοῦ ἐπὶ τὰ θυμιατήρια*. The mark of punctuation (:) seems to be crowded in at the end of the last word (*θυμιατήρια*) in much the same way as after the words *Ἀθηναίας χρυσίου*, so that I here restore the combination of signs that occurs there, ΙΕ, which I suppose to signify $1\frac{3}{4}$

¹ A woman of this name is stated in *C.I.A.* II, 2, 652, B, l. 33, to have dedicated to Athena a gold seal-ring in a box.

obols. In the other three cases it is to be observed that no punctuation whatever is seen before the sign representing the weight of the δοκιμείον.

LINES 13, 14. — When we see that the weight of the next object agrees with that of the first and third δοκιμεία (1^c), we are forced here too, as in line 11, to supply δοκιμείον τοῦ, understanding the reference to be to the gold ornamentation of the chair. Even before I had discovered the connection between the two fragments, I had restored ἐπεγέγραπτο οὐδέν, in preference to reading γραπτοῦ οὐδέν; and this is confirmed by the fragment published by Koehler, for it gives exactly the right number of letters, and the top bar of the second ε is plainly visible.¹

Although these δοκιμεία are referred to in some five other inscriptions,² the references occur in such fragmentary places that nothing has hitherto been made out about them. The new inscription is important, then, as casting light upon these corrupt passages, and as giving us some idea of the size of these δοκιμεία and of the vessels that were thus tested.

Two theories may be advanced as to the use made of these δοκιμεία. They may have been kept safely under lock and key in order to be used from time to time to test the gold of which the vessels were composed, in order to see that the temple servants did not substitute vases with gold of an inferior quality; or they may have been used when the vase was first turned over by the goldsmith to test his fulfilment of the contract entrusted to him. They would then be kept as a record of the quality of the gold used, and therefore of the value of the vases. In either case a skill in getting the specific gravity of a little piece of metal weighing about a quarter of a drachma is a prerequisite of no mean importance.

¹ Elsewhere, however, the perfect ἐπιγέγραπται is consistently used in such cases; e.g. *C.I.A.* II, 2, 724, 725.

²

<i>C.I.A.</i> II, 2, 677, I, ll. 28–34.	(Four δοκιμεία listed.)
<i>C.I.A.</i> II, 2, 678, A, III, ll. 9–18.	(Four δοκιμεία listed.)
<i>C.I.A.</i> II, 2, 701, II, l. 30.	(One δοκιμείον listed.)
<i>C.I.A.</i> II, 2, 701, II, l. 66.	(Δοκιμεία ἐν κιβωτίῳ.)
<i>C.I.A.</i> II, 2, 703, I, l. 15.	(Δοκιμεία ἐν κιβωτίῳ.)

We are to suppose that the *δοκιμεία* were kept properly labelled, for in the last case we are specifically informed that there was no such label attached. How it was known that this was a *δοκιμείον τοῦ θρόνου* I cannot say.

The objects that follow are mentioned in a large number of the treasure lists, and always in more or less stereotyped phraseology. I shall mention variations in the readings very briefly, laying emphasis only on such points as have to do with my own restorations.

LINES 14, 15. — The first of these, *στέφανος χρυσοῦς δν ἡ Νίκη ἔχει ἐπὶ τῆς κεφαλῆς ἢ ἐπὶ τῆς χειρὸς τοῦ ἀγάλματος τοῦ χρυσοῦ ἄστατος*, is referred to in twelve more or less fragmentary places (*C.I.A.* II, 2, 649, l. 1; 651, l. 1; 652, A, l. 40; 654, *a*, l. 23; 657, l. 4; 658, l. 2; 660, l. 18; 667, l. 31; 674, *a*, l. 11; 719, l. 8; 727, l. 14; *Δελτίον Ἀρχαιολογικόν*, 1888, p. 220). The language of these inscriptions is not exactly the same in all cases. Thus, *ἄσταθμος* and *ἄστατος* each have the support of two inscriptions: *ἄσταθμος*, *C.I.A.* II, 2, 652, A, l. 42, and *Δελτίον*, 1888, p. 220; *ἄστατος*, *C.I.A.* II, 660, l. 19, and 674, *a*, l. 12. In the present inscription *ἄστατος* alone is possible. In *C.I.A.* II, 649, l. 3, for the words *τοῦ ἀγάλματος τοῦ χρυσοῦ*, which is the usual formula, we find, as here, [*τοῦ χρ*]υσοῦ ἀγάλματος.

It is to be noticed that an erasure of a single letter seems to have been made at the end of l. 14; to this conclusion I was driven even before I discovered the connection of the fragment published by Koehler with the inscription before us, for I could not possibly compress the five or six lines that immediately follow into the compass of fifty-three letters each. The conjecture was confirmed by the little fragment of *C.I.A.* II, 2, 684. The stone-cutter probably engraved the letters *ἐπ* at the end of l. 14 and then started in on the following line with the last letter he had cut. On discovering his mistake he deleted the first of the two letters. The reference is of course to the Victory on the hand of the chryselephantine statue of Athena.

LINES 15, 16. — The ἀναθήματα next mentioned, σφραγιδίω λιθίνω δύο, τὸ μὲν χρυσοῦν ἔχον δακτύλιον, τὸ δὲ ἀργυροῦν, are not elsewhere described in so logical a manner as here. We find indeed two formulae used, neither of which is capable of a strictly grammatical exegesis: thus in *C.I.A.* II, 2, 652, A, 1. 45, we read [δύο σφρ]αγίδε λιθίνω χρυσοῦν ἐχούσα τὸν δακτύλιον ἢ [δ' ἐτέρα ἀργυρ]οῦν, and again in 660, 21, σφραγίδια λίθινα δύο χρυσοῦν ἔχον τὸν δα[κτ]ύλ[ι]ον ἢ δὲ ἀργ[υροῦν]. Cf. for the first, *C.I.A.* II, 658, 1. 6, and 649, 1. 20, and for the second, *C.I.A.* II, 667, 1. 40. Notice that the Greek spoke of a seal with a ring, not of a ring with a seal. In his concept the ring served merely as a means of carrying the seal. I may incidentally observe that *C.I.A.* II, 2, 713, end, may be exactly restored from *C.I.A.* II, 2, 660, 1. 21 (thirty-four letters to the line), σφραγίδι[α λίθινα || χρυσὸν ἔχον τὸν δακτύ (end of line) λι]ον[, ἢ δὲ] ἀ[ργυροῦν], and that *C.I.A.* II, 2, 661, 1. 1, [ἢ δ' ἐτέρα ἀρ]γυροῦν shows the same formula as *C.I.A.* II, 2, 652, A, 1. 45; 658, 1. 6 and 649, 1. 20.

LINES 16–18. — The next object, μάχαιρα σιδηρᾷ ἐλεφάντινον κολεόν ἔχουσα. ταύτην ἢ βουλὴ ἀνέθηκεν ἢ ἐπ' Ἀντιγένους ἀρχοντας. Μελητάδου παρακαταθήκη, is mentioned in eight inscriptions: *C.I.A.* II, 649, 1. 15; 652, A, 1. 46; 658, 1. 8; 660, 1. 22; 661, 1. 3; 676, 1. 1; 714, 1. 6; *C.I.A.* II, 2, *Add. et Corr.* 729, b, A, 1. 5. The name of the archon occurs in two of these, so that there can be no doubt of the reading Ἀντιγένους here. (*C.I.A.* II, 2, 649, 1. 17, and 661, 1. 3.) It is noteworthy that in only one of these inscriptions (*C.I.A.* II, 2, *Add. et Corr.* 729, b, A, 1. 5) is the fact mentioned that this was an iron knife, and in that place the adjective [ό]λοσίδηρος is used, not as here σιδηρᾷ.¹ We get from the new inscription a bit of information not given us in any of the other lists; namely, that this knife was a παρακαταθήκη of one Meletades.²

¹ In *C.I.A.* II, 2, 714, 1. 6, we ought to restore the word ὀλ[οσίδηρος] in a long lacuna, and in *C.I.A.* II, 2, 676, ll. 1–3, since the participle ἔχουσα elsewhere always follows the word κολεόν, the reading should certainly be (as here) μάχαιρα σιδηρᾷ ἐλεφάντινον τὸ κολεόν ἔχουσα.

² Cf. *C.I.A.* II, 2, 660, 1. 22.

It seems to have been deposited by him with the senate, which dedicated it to the goddess Athena, perhaps after the death of the depositor. In no other way than this can I explain the statement that the senate dedicated this offering.

In l. 18 the break between the word ἀργύριον and the next object (βοίδιον) may be exactly filled by the adjective ἐπίτηκτον. This ἀργύριον ἐπίτηκτον is mentioned in two of the treasure lists (*C.I.A.* II, 2, 660, l. 49, and 661, l. 19), but in both cases the expression σύμμεικτον καὶ ἐπίτηκτον is used. There can, however, be little doubt that my restoration in this place is correct, though we should naturally expect the weight to be given as is the case in the second of the inscriptions cited above (σταθμὸν ΔΙΙ, παρακαταθήκη).

Another possibility is, comparing *C.I.A.* II, 2, 661, l. 20, where a number of παρακαταθήκαι are listed (-άδου Ἐρχιῶς ἀργυρίου ΔΔΔ), and 654, frg. *bc*, ll. 3-4, to suppose that a punctuation mark was omitted before Μελητάδου παρακ.¹ and that this 'deposit' was ἀργυρίου σταθμὸν ΔΔΔ.

LINE 18. — Mention of the βοίδιον ἐλεφάντινον is made in seven passages, four times in the words βοίδιον ἐλεφάντινον alone (*C.I.A.* II, 2, 652, B, l. 4; 654, *bc*, l. 9, in a restored passage; 661, *d*, l. 24; 667, l. 43), and three times with a lacuna of eight letters coming between these words and the words ἀνέθηκεν (*C.I.A.* II, 2, 676, l. 4; 701, II, l. 51; 713, l. 16). We must in these latter inscriptions restore from here: [δ Σμικύθη] ἀνέθηκεν. The name Σμίκυθος is not uncommon in Attic inscriptions of this period. Σμικύθη occurs elsewhere only in *C.I.A.* IV, 2, 1296, *b*, and 2171.

LINE 19. — The next ἀνάθημα, στατήρες κίβδηλοι ἐγ κιβωτίῳ παρὰ Δάκωνος σεσημασμένοι, is mentioned four times: *C.I.A.* II, 2, 652, B, l. 11; 660, l. 57; 661, l. 29; 701, II, l. 59. If we were to judge simply from the wording of the inscription before us, we should suppose that these staters had been coined by

¹ I called attention above to the fact that nowhere else is the μάχαιρα σιδηρᾷ said to be a παρακαταθήκη of Meletades unless it be perhaps in *C.I.A.* II, 2, 660, l. 22, *q.v.*

Lakon, and it is true that the word *σεσημασμένοι* sometimes has that meaning. Boeckh (*Staatsh.* II, p. 231), who erroneously supplied *κατακεχρυσωμένοι* (in *C.I.A.* II, 2, 652, B, l. 11), interpreted it as ‘forged by a Lacedemonian’ and referred to Herod. III, 56 and Plut. *Lysand.* 18 as giving parallel cases. The word is, however, so frequently applied to objects sealed up in a box (being in *C.I.A.* II, 2, 720, B, I, l. 48 plainly opposed to *ἀνέφγμένον*), that I prefer here to give it the meaning ‘sealed.’ This explanation is strongly supported by the order of the words in *C.I.A.* II, 2, 652, B, l. 11: *στατήρες κίβδηλοι ἐν κιβωτίῳ σεσημασμένοι οἱ παρὰ Λάκωνος*. From *C.I.A.* II, 2, 701, II, l. 59, as restored by Kirchhoff, we learn that there were forty of these *στατήρες*.

LINE 20. — There follows in our list an *ὄνυξ μέγας κατεαγώς* which is referred to seven times:

- (1) *C.I.A.* II, 2, 660, l. 57, *ὄνυξ μέγας*.
 (2) *C.I.A.* II, 2, 676, l. 18, *ὄνυξ μέγας κατεαγώς*.
 (3, 4, 5) *C.I.A.* II, 2, 701, II, l. 57; 703, l. 8; 713, l. 23, *ὄνυξ κατεαγώς*.
 (6, 7) *C.I.A.* II, 2, 652, B, l. 12 (in 661, l. 30 the same restored), *ὄνυξ μέγας τραγελάφου πρια[πίζοντος στα]θμὸν ΔΔΔΤΤ*.

The next object, *παλλάδιον ἐλεφάντινον ἐπίχρυσον καὶ ἀσπὶς ἐπίχρυσος* δ' Ἀρχίας ἐμ Πειραεὶ οἰκῶν ἀνέθηκεν, is also mentioned many times. The adjectives *ἐπίχρυσος* and *περίχρυσος* seem to be used indiscriminately, though *ἐπίχρυσος* is the one most frequently used in connection with these objects. *περίχρυσος* properly means ‘set in gold,’ while *ἐπίχρυσος* means ‘plated with gold.’

	<i>παλλάδιον</i>	<i>ἀσπὶς</i>
<i>C.I.A.</i> II, 2, 652, B, l. 17,	<i>περίχρυσον</i>	<i>περίχρυσος</i>
<i>C.I.A.</i> II, 2, 660, l. 59,	<i>περίχρυσον</i>	<i>ἐπίχρυσος</i>
<i>C.I.A.</i> II, 2, 667, l. 44,	<i>ἐπίχρυ[σον]</i>	
<i>C.I.A.</i> II, 2, 676, l. 6,	<i>[ἐπίχρυ]σον</i>	<i>[ἐπίχρ]υσος</i>
<i>C.I.A.</i> II, 2, 701, II, l. 52,	<i>[ἐπίχρυσον]</i>	<i>ἐπ[ίχρ]υ[σ]ο[ς]</i>

C.I.A. II, 2, 713, l. 17, παλλάδιο[ν ἐλεφάντινον ἐπίχρυσον] κα[ὶ] ἀσπιδίσκη [ἐπίχρυσος δ' Ἀρχίας ἐμ Πει]ραι(εῖ) οἰκῶν ἀνέθη[κεν]. The term ἀσπιδίσκη is also used in *C.I.A.* II, 2, 676, l. 7 and 701, II, l. 52.

This offering was made in the year 398–397, for it is mentioned in the ἐπέτεια or ‘yearly increase’ of this year (see *C.I.A.* II, 2, 652 and 660), thus giving us a date earlier than which we cannot place the inscription before us. The βοίδιον, στατήρες, ὄνυξ, and γοργόνειον are listed among the ἐπέτεια of the year 399–398 (*C.I.A.* II, 2, 652, ll. 2–13).

LINE 22. — Χρυσίτις λίθος ἐπὶ κίονος ξυλίνου. This is elsewhere spoken of but three times, and in only one case are the words given as here in full:

C.I.A. II, 2, 676, l. 9, [χρυσί]τις λίθος ἐπὶ κίονο[ς ξυλίνου].

C.I.A. II, 2, 701, II, l. 54, [χρυσίτις λίθος ἐπὶ κίον]ος.

C.I.A. II, 2, 713, l. 21, χρυσίτις λ[ίθος ἐπί]-
χρυσος, οὐχ ὕγις.

In the latter case the words ἐπὶ κίονος ξυλίνου would exactly fill the gap, but the adjective ἐπίχρυσος is a strange one to apply to a touchstone. It is more probable that the lacuna contained the words κυνὴ χαλκῇ,¹ to which the epithet ἐπίχρυσος is applied in *C.I.A.* II, 2, 676, l. 11. The χρυσίτις λίθος is of course the lapis *Lydius*, used for testing gold.

The next ἀνάθημα, the κυνὴ χαλκῇ, in both places where it occurs directly follows the χρυσίτις λίθος. It is described as ἐπίχρυσος in the one case (*C.I.A.* II, 2, 676, l. 11), and in the other (*C.I.A.* II, 2, 701, II, l. 55) there is room for the restoration of this word.

Next comes in our list a γοργόνειον χρυσοῦν ὑπάργυρον ἐπίτηκτον ἀπὸ τῆς ἀσπίδος τῆς ἀπὸ τοῦ ἔδους, which is referred to some ten times in about the same words as here: *C.I.A.* II, 2, 652, B, l. 2; 654, b, l. 7; 660, l. 53; 661, l. 23; 665, l. 11; 666, l. 11; 667, l. 45; 673, l. 1; 726, II, l. 12; 736 B, l. 3.

¹ I can suggest nothing to fill the space of six letters left in this way before the κυνὴ χαλκῇ.

The inscription in *C.I.A.* II, 2, 667, l. 45 (cf. 665, l. 11) γοργόνειον ἀσπίδος ἐπίτηκτ[α] ἐπάργυρ[α] σταθμὸν ΗΗΗ[Γ] shows us that the γοργόνειον was of considerable weight. The ἔδος must be the chryselephantine statue of the goddess, but as to what is meant by the heaping up of epithets, χρυσοῦν, ὑπάργυρον, ἐπίτηκτον, I confess I have little idea. Are we to conceive of the gorgoneion as being simply gold-plated (χρυσοῦν, ἐπίτηκτον) over silver (ὑπάργυρον) or, as is perhaps less likely, as having gold hair made of snakes welded on (ἐπίτηκτος) to a silver gorgon's face? The adjective ἐπίτηκτος has both of these meanings. In any case we notice that it formed a removable part of the shield. In order to fill the gap at the end of l. 23, we may supply some such word as ληφθέν, or we may suppose the word ἄστατον to have been crowded in. Elsewhere the lines number exactly fifty-four letters.

LINE 24. — The γραμματεῖον παρὰ τῆς βουλῆς τῆς ἐξ Ἀρείου πάγου σεσημασμένον is mentioned six times in these treasure lists with more or less fulness: *C.I.A.* II, 2, 673, l. 2; 676, l. 12; 701, II, l. 55; 703, l. 7; 713, l. 22; 720, B, I, l. 48. In the last (which reads γρα[μματεῖα δύο χαλ]κᾶ, τὸ μὲν σεσημα[σμένον, τὸ δὲ ἀ]ν[ε]ργ[α]σμένον) there may be no reference to the letter from the Areopagus, but as it is a 'sealed letter' (σεσημασμένον), I have included it here for the sake of completeness.

Θήραια are referred to but twice, *C.I.A.* II, 2, 674, l. 22, and 676, l. 43. In the latter the word θήραια is followed by two upright marks, indicating probably the two here mentioned. Line 25 of the new inscription ends with the letters ΘΗ, so that there can be little doubt of the reading ἕτερον νέον θήραιον. From Athenaeus (424F) we learn that the θήραιον or θηραϊκόν was a kind of ἱμάτιον worn in the satyric drama at Athens, and from Pollux (VII, 48) that the name was either derived from the island Thera, or was given it because the garment was woven so as to represent the skin of a wild beast (ἦτοι ἀπὸ τῆς νήσου ἢ τὸ ὡς θηρίον ἐνυφασμένον). Cf. Schol. Aristoph.

Lys. 150; Hesych. s.v. θήραιον (cod. θήρεον); Photius, s.v. Θήραιον (*sic*); Pollux, IV, 118, Θήραιον τὸ Διονυσιακόν. There is one other occurrence of the word in an inscription: *C.I.A.* II, 1, 374, l. 15, where it is the offering of a priestess and is associated with certain veils or ἱμάτια made of hair (τρίχαπτα).

LINE 26. — Θρόνοι μεγάλοι ||| οὐχ ὑγιεῖς ἀνακλίσεις ἔχοντες ἡλεφαντωμένas are referred to five times, and in every case but one a reference to another θρόνος follows immediately. This is twice spoken of, as here, in the words ἕτερος θρόνος, with the further description ἀνάκλισιν ἔχων (*C.I.A.* II, 2, 673, l. 3; 676, l. 14), while in one case it is stated to be without a back (*C.I.A.* II, 2, 713, l. 8) ἀνάκλισιν οὐκ ἔχων. A minor verbal difference with regard to the three large θρόνοι is that in two cases the participle ἡλεφαντωμένοι agrees with the word θρόνοι, while in one case it agrees with the word ἀνακλίσεις (*C.I.A.* II, 2, 676, l. 14).¹

As is well known, the treasure lists of the fifth century B.C. and those of the fourth differ greatly both in external form and in the ἀναθήματα listed, very little of the gold and silver treasure of the fifth century having survived the exigencies of the Peloponnesian War. As to the arrangement of the lists, we know that in the fifth century the four colleges which had charge of the treasure during the successive years of the Panathenaic penteteris handed over to the college that succeeded them at the end of this period separate lists of the treasure kept in the Pronaos, the Hekatompedos, and the Parthenon, together with annual codicils of the objects added during the four years of their administration (the so-called ἐπέτεια). The treasures of the other gods seem to have been listed separately during this period (Kirchhoff, *Abhandlungen der Berl. Akad.* 1864).

In the fourth century, although the fragments of inscriptions are as numerous and as well preserved as in the fifth, the

¹ In addition to the references given above, *C.I.A.* II, 2, 674, b, ll. 21 and 701, II, l. 43 mention these θρόνοι.

arrangement is not so simple nor so stereotyped as in the previous century. It is therefore a less easy task to arrange and restore the fragments so as to obtain a complete picture of the method in use. The colleges of the treasurers of Athena and of the other gods seem first to have been united, then separated, and finally again united. Since this new inscription does not throw any light on these changes, I shall content myself with a brief statement of the results obtained by Lehner in his *Abhandlung über die Athenischen Schatzverzeichnisse des vierten Jahrhunderts* (1890), in order to show in what period the inscription probably belongs.

Lehner sees reason to place the first important change, *i.e.* the uniting of the treasures of Athena and that of the other gods, and the giving up of the penteteric arrangement between the years 407-406 and 404-403 B.C. At this time the treasure had become so reduced that it seemed unnecessary to maintain the two separate boards. During this first period, then, the treasures of Athena are listed with those of the other gods on three tablets, one containing the objects preserved in the Hekatompedos, one the objects *from* the Parthenon (*ἐκ τοῦ Παρθενῶνος*), and one the objects *from* the Opisthodomus (*ἐκ τοῦ Ὀπισθοδόμου*). The objects from these last two chambers were at that time probably also kept in the Hekatompedos. This period lasts, according to Lehner, up to 385-384 B.C. Although the new inscription dates from the period following this, it is to be noticed that most of the objects mentioned in it were listed during this first period in the treasure of the Hekatompedos; so, *e.g.*, the *τρῆς οἶνοχόαι*, as well as all the offerings mentioned in the last part of the inscription as far as the *θήραια*. Among the gods whose treasures were then catalogued with those of Athena are Zeus Polieus, *τὸν θεῶν*, Brauronian Artemis, Poseidon of Sunium and the Anakes.

In the year 385 B.C. the ever-increasing number of *ἀναθήματα* made it desirable to separate again the treasures of Athena from those of the *ἄλλοι θεοί*. But as the primary object of this separation was to provide for the listing of the new offer-

ings, it does not surprise us to find that the already existing offerings were not at once transferred to the jurisdiction of the new college. Thus in the inscription before us we find an *οἰνοχόη τοῖν θεοῖν* still listed among the treasure of Athena.

With this restoration of the treasuries of the other gods was coupled the giving up of the custom of designating from what place the object came (*ἐκ τοῦ Παρθενῶνος, ἐκ τοῦ Ὀπισθοδόμου*), for we find objects that we know to have been previously thus described now recorded together with the Hekatompedos treasure. In the inscription before us the *χρυσίον ἐγ κιβωτίῳ ἀπὸ τοῦ κανοῦ ἵνα τὰ ἐλεφάντινα ζώδια* is a case in point, for we know that in the previous period this was listed as *ἐκ τοῦ Ὀπισθοδόμου* (Kirchhoff, *Sitzb. Berl. Akad.* 1887, S. 1201, n. 45).

It is to the treasure lists of this period that the new inscription bears the greatest resemblance, so that I should place it at any rate later than 375 B.C., when the treasuries were actually separated. The consistent use of O and E for the spurious diphthongs *ou* and *ei* respectively prevents our dating it later than the first half of the fourth century.

CARROLL NEIDE BROWN.

ASHEVILLE SCHOOL.

TWELVE MORTUARY INSCRIPTIONS FROM SIDON

ON the occasion of two visits to Sidon, early in 1903, it was my fortune to see, in different localities, a number of small tombstones, or "markers," like those which appear in the accompanying cut from a photograph (Fig. 1). Many of a similar character are known, and the inscriptions of some have been published (see *e.g.* Harris, *Haverford College Studies*, X, pp. 24-26). I saw none of these stones in the original position, but learned on good authority that they were frequently found in opening the old tombs about Sidon. It appears that they served to perpetuate the memory of the new occupants of the ancient niches before which they stood. They range from 8 inches to 18 inches in height, and consist of an ovally rounded column resting on a square base. Sometimes they are in two pieces, but more usually in one solid one. The inscription is cut on the base, at times with great care and precision, but oftener in rough, rude outlines. Near the top of the column there is a simple ornamentation, like that appearing in the illustration. I saw one stone, $12\frac{1}{2}$ inches high, that, so far as one could judge, had never been inscribed. In most cases I had opportunity only for copying and hasty measurement.

1. ΠΤΟΛΕΜΑ

ΧΡΗCΤΗΚΑΙ

ΑΛΥΠΕΧΑΙΡ

ΖΗCΑCΑΕΤΗ

Ξ Ζ

Πτολέμα χρηστή καὶ ἄλυπε χαῖρ(ε)
ζήσασα ἔτη ξξ'

*Ptolema, good and happy, farewell! having
lived 67 years.*

This stone was in two pieces, the column being $9\frac{3}{4}$ inches high and $16\frac{3}{4}$ inches in circumference, and the base $5\frac{3}{8}$ inches

high, $7\frac{3}{8}$ inches broad, and $6\frac{1}{2}$ inches thick. The letters were regular and beautifully executed.

2. ΚΟΔΡΑΤΕ

ΧΡΗCΤΕ

ΒΙΩCΑCΚ

ΑΛΩCΖΗ

ΕΤΗ. Μ

Κόδρατε χρηστὲ βιώσας καλῶς ζή(σας)
ἔτη μ'

Codratus, good, of noble life, who lived 40 years.



FIGURE 1. — TYPES OF TOMBSTONES FROM SIDON.

The whole stone was $10\frac{1}{2}$ inches high, and the columnar portion $14\frac{1}{4}$ inches in circumference. The letters were somewhat irregular. It is noticeable that βιώσας¹ appears here along with ζήσας, which is the usual *terminus technicus* for stating the age.

3. ΠΤΟΛΕΜ/!

ΧΡΗCΤΕ

ΧΑΙΡΕΖΗC

ΑCΕΤΗΚΗ

Πτόλεμε(?) χρηστὲ χαίρε ζήσας ἔτη κή

Ptolemy, good friend, farewell! having lived 28 years.

This stone was 19 inches high, and the columnar portion 20 inches in circumference. Letters irregular.

¹ Cf. *D. Mitth.* 1899, p. 83, no. 5.

4. Γ Η Ι Ξ Ι Ω Ν
 Χ Ρ Η C Τ Ε Γηρ(?)ίων χρηστὲ καὶ ἄλυπε χαῖρε ζήσας
 Κ Α Ι Α Ι Ξ Υ Π ἔτη --
 Χ Α Ι Ρ C Ξ Ξ Ι Gerion, good and happy, farewell! having lived
 C Α Ε Τ ΞΞ -- years.

The whole stone was only $8\frac{1}{2}$ inches high, and the columnar portion $11\frac{3}{4}$ inches in circumference. The letters were rudely cut, and the surface so broken that the numeral could not be made out.

5. - Ο Υ --
 Φ Ι Λ Ω Ν ου(?)--φίλων χρηστὲ καὶ ἄλυπε ζήσας
 Χ Ρ Η C Τ Ε ἔτ(η) νγ'
 Κ Α Ι Α Λ Υ Π Ε ---philon, good and happy, who lived 53 years.
 Ζ Η C Α C Ε Τ
 Ν Γ.

This stone was $12\frac{1}{4}$ inches high, rudely cut, and difficult to make out. The name or names I did not determine.

6. Φ Ι Λ Ω
 Ν Χ Ρ Η C Φίλων χρηστὲ καὶ ἄλυπε χῆρε ζήσας ἔτη
 Τ Ε Κ Α Ι ξέ(?)
 Α Λ Υ Π Ε Philo, good and happy, farewell! having lived 65(?)
 Χ Ε Ρ Ε Ζ Η years.
 C Α C Ε Τ
 Ξ Ε

This stone was $13\frac{7}{8}$ inches high, and the columnar part 14 inches in circumference. The letters were irregularly cut. We have here χῆρε for χαῖρε.

7. Φ Ι Λ Ω Ν
 Χ Ρ C Τ C Φίλων χρ(η)στὲ (καὶ) ἄλυ(πε) χῆρε --
 Α Λ Υ Philo, good and happy, farewell!
 Χ Ε Ρ
 -- --

I have no measurements for this stone. The inscription was badly defaced. So far as it could be made out, it was exactly like the preceding.

8. ΕΥΤΥΧΙΔΗ
ΧΡΗCΤΑΙΚΑΙ
ΑΛΥΠ---

Εὐτυχιδῇ χρησταὶ καὶ ἄλυπ(ε)
Eutychide, good and happy, —.

The stone was $12\frac{1}{2}$ inches high, and the columnar portion 18 inches in circumference. The letters were irregular and the inscription incomplete. *χρησταὶ* for *χρηστή*.

9. ΚΟΔΡΑΤΙ
ΛΑΧΡΗCΤ
ΗΧΑΙΡΕ

Κοδρατίλα χρηστή χαίρε
Codratila, good lady (?), farewell!

The stone was $13\frac{1}{2}$ inches high and the column $20\frac{1}{2}$ inches in circumference. The letters were irregular. The age was not given.

10. ΡΟΥΦΙΛΛ==
ΧΡΗCΤΗΚΑ
ΑΛΥΠΧΑΙΡ
ΖΗCΑCΑΕΤΗΡ

Ῥουφίλλα(?) χρηστή κα(ι) ἄλυπ(ε)
χαίρ(ε) ζήσασα ἔτη ρ'
*Rouphilla, good and happy, farewell! hav-
ing lived 100 years.*

The stone was 10 inches high, with a column $14\frac{1}{2}$ inches in circumference. Letters rudely cut and hard to read.

11. ΚΑΛΛΙCΤΙΩΝ
ΧΡΗCΤΕΚΑΙ
ΑΛΥΠΕΧΑΙ
ΡΕΖΗCΑC
ΕΤΗ Π

Καλλιστίων χρηστὲ καὶ ἄλυπε χαίρε
ζήσας ἔτη π'
*Callistion, good and happy, farewell! hav-
ing lived 80 years.*

The stone was 13 inches high, and the base 7 inches wide. The letters were clearly cut.

12. CΤΡΑΤΩΝΧΡΗC
ΤΕΚΑΙΑΛΥΠΕΚ
ΑΙΑΩΡΕ

Στράτων χρηστὲ καὶ ἄλυπε καὶ
ἄωρε
Straton, good and happy and untimely —

This was a tombstone which evidently came from some cemetery outside the city, and was altogether unlike the stones previously described. It was 2 feet 9 inches high, and at the base it was 8 inches thick and 1 foot 6 inches wide. Above the inscription was the figure of a small lad in high relief, standing between two columns also in relief. The figure was well executed, and called to mind the Athenian gravestones.

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A GROUP OF DIONYSIAC SCULPTURES FOUND
AT CORINTH

[PLATE XIII]

ALTHOUGH Pausanias mentions no temple of Dionysus at Corinth, he describes certain statues of this god in the Agora as having a peculiar sanctity. In fact, it is only natural to suppose that the god of the vine would have had his fair share of worship bestowed on him by the pleasure-loving city, so long devoted to the worship of Aphrodite. At any rate it will cause no surprise that the recent excavations have yielded a group of sculptures that may be called Dionysiac.

This group consists of five members, which will here be described in the order of their discovery.

No. 1 (Fig. 1). A symplegma was found in 1896 in the trial Trench VIII,¹ near the Panagia church and just south of the limits of the Agora, at a depth of about 4 m. The material is Parian marble. The group is composed of three figures, a male person in the centre, presumably Dionysus, a female, probably a Nymph, on his right, and Pan, who furnishes the key to the interpretation, on his left. The figures are under life size, the height of the central figure in its present condition being only 0.52 m.; with the addition of the missing neck, head, and feet it could not have been more than a metre high.

Judging from the strong divergence of the two principal figures, the nymph seems to be struggling to free herself from the advances of Dionysus, whom Pan seems to be encouraging or supporting in the struggle. Representations in which

¹ *Am. J. Arch.*, Second Series, Vol. I, 1897, p. 472.



HEAD OF DIONYSUS FROM CORINTH

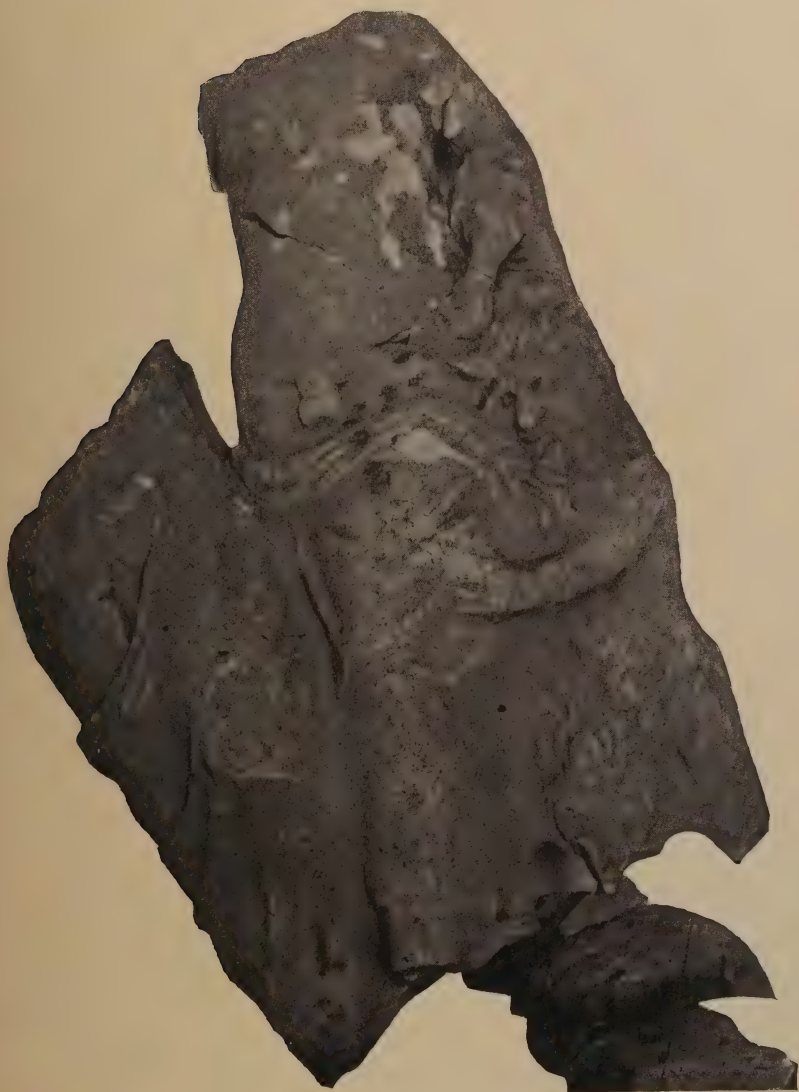


FIGURE 1. — DIONYSIAC SYMPLEGMA FROM CORINTH.

Dionysus appears partly overcome by wine and supported by faithful attendants are too numerous to cite here. But if our interpretation of this group is correct, we have a rare case of the god represented in an attempt to combine the pleasures of love and wine, in which attempt he needs the active assistance of Pan.

The imperfect preservation of the group detracts from its importance, and justifies a rather summary treatment of it. The head of Pan is the only one preserved, and this is disproportionately large, which is a common feature in such groups, as well as in single figures.¹

The execution also is very imperfect. It is true that the working out of the two principal figures, especially at the back, is worthy of the art of the fourth century B.C. But Pan is simply blocked out in relief, as it were, and the left hand of Dionysus which rests on his head is a formless mass. There can be little doubt that the sculptor's work was interrupted, as was the case with the Dionysiac symplegma found near the Olympieion in Athens.² Had it not been so interrupted, and had the preservation been complete, there can be no doubt that in spite of the small size of the group it would have made a fine impression. As we now have it, without the heads of the two principal figures, one can hardly judge whether it was a product of Greek Corinth or Roman Corinth. The closest parallel to it which I have been able to find is the group in the Berlin Museum, *Catalogue*, no. 97, in which the inclination of the figures and the position of Pan is reversed. This is characterized as, "Arbeit untergeordneter Art und später Zeit mit Benutzung griechischer Motive." Our group certainly has more of the Greek afflatus about it than this Berlin group.

No. 2. This has already been published in the sixth volume of this *Journal* (1902), p. 427, by Mr. Tucker. It is the lower

¹ A single instance, Clarac, *Musée de Sculpture*, pl. 716, D, no. 1736, G (Villa Albani), will suffice. Of course the long shaggy beard often contributes to the apparent size of the head.

² *Ephemeris Archaeologike*, 1888, pl. i; Kabbadias, *Catalogue of National Museum*, no. 245.

part of a colossal draped Dionysus with a panther crouching at his right side.

No. 3 (Fig. 2). This is a work of undoubted merit, which, in spite of its fragmentary condition, makes its own impression, even without the assistance of imagination in restoring the missing parts. It was found in 1900, southwest of the west end of the Propylaea, about 12 m. to the south of the foundation on which I would place the colossal statues found at the same time and place.¹ It was thus well inside the Agora.

It is of Parian marble, and is 1.27 m. high and 0.96 m. broad. The surface on which the figures are carved is convex, and the total breadth of the preserved surface is 1.09 m. We have represented in low relief on this slightly curved surface two dancing Maenads,² revealing all the ecstasy and abandon of the Bacchic revel, shown both by the poses impossible to be held for more than a moment and by their garments fluttering in the breeze created by their quick motion. The subject is assured by the fawnskin, the head of which is seen under the girdle of the right-hand Maenad, while one of the feet swings loose from her right side.

That the relief is only a part of a larger field is certain. It is now cut off to the right and left very roughly, and the back is hollowed out in the same rough way. That it formed part of a base for a group of statuary is possible; but the base could not have been circular unless it was of enormous extent, because the curve is so gentle. An elliptical base seems possible.

At the top of the relief very little is lacking. The slight addition required to give room for the head of one figure and the raised right arm of the other would not require a total height of more than 1.50 m.; but in those few inches that are broken away lay what gave the relief its significance and value, the heads. That they must have been excellent can be inferred from the excellence of the rest.

¹ *Am. J. Arch.*, Second Series, Vol. VI, 1902, pp. 7 ff.

² The right-hand Maenad is 1.00 m. high. The distance between her breasts is 0.13 m. The left-hand Maenad's leg measures from knee to sole, 0.40 m.



FIGURE 2. — MAENADS ON A RELIEF FROM CORINTH.

One can hardly glance at this relief without being struck by a general similarity between it and the Nike Balustrade. This was the simultaneous expression of all present at the finding of it. The poses impossible to be retained for more than an instant, the fine play of drapery, and the revelation of the forms beneath it are just the features that distinguish the figures on the balustrade. To be more specific, one might see in the right-hand Maenad a striking resemblance to the Nike holding a cow,¹ and in the other, with its precarious pose which must in the next instant end in a fall or a quick recovery, a resemblance to the famous "Sandal-Binder."²

It is true that when the earth was washed away from the relief certain rough places which showed the work of the toothed chisel, for example, in the field over the left shoulder of the right-hand Maenad, raised the suspicion that the work might be Roman. But since parallels to this careless finish are found in some reliefs of a good Greek period, there seems no objection to considering this relief a work of Greek art. Luckily the everlasting question in regard to statues in the round, whether we have to do with an original or a copy, finds less place in reliefs. It may, however, be readily conceded that the artist, be he of the fourth century, or even later, may well have been inspired by the figures of the Nike Balustrade. It may also be supposed that he was under the influence of Skopas' famous "Maenad." That he was, however, no slavish copyist, but both knew his own mind and had a practised hand, is certain.

There are certain details which deserve noting in addition to the general excellence in pose and drapery; for instance, the beautifully wrought sandal on the left foot of the left-hand Maenad and the gathering of the folds of the garment over the instep of the other Maenad.³

¹ Kekulé, *Die Reliefs an der Balustrade der Athena Nike*, Taf. i, A.

² Kekulé, *op. cit.* Taf. iv, O.

³ Only the right leg of this figure is represented; the other is, so to speak, thrown back into the stone. One might, indeed, be in some doubt as to which it is that is presented; but the prominence of the calf of the leg which does appear seems to decide that this is the right leg.

A curious elongated object looking like a leaf with a rib in the middle, which runs out in a projection like a mouse's tail, is seen fluttering from the right hand of the Maenad to the right. The shape is identical with a carving on one end of a dark marble block, found in front of the Propylaea. Since on the opposite end of this block a trailing vine was carved, it seemed only natural to refer this leaf-like object also to the vegetable kingdom. Maenads are wont to appear decked out, not only with ivy, but also with other plants.

Still, the object in question may be the end of a fillet held in the hand, particularly since as a leaf it would be disproportionate in size to the arm.

Many representations more or less parallel to the one under discussion might be cited; but there is one, not a relief to be sure, but a round figure which, both in attitude and style, seems to match ours most closely, viz. the Dancing Maenad in the Berlin Museum, *Catalogue*, no. 208. (Represented also in Collignon, *Hist. de la Sculpture Grecque*, vol. II, fig. 318, p. 602.) This is spoken of as "eine meisterhafte Arbeit im Character der Kunst der hellenistischen Zeit."¹

We may note that the figures on a base discovered at Ephesus (Collignon, *Hist. de la Sculpture Grecque*, vol. II, fig. 207, p. 391) resemble ours in attitude, but not in spirit.

The two remaining numbers are simply examples of well-known and oft-repeated types. The former has the merit of being an excellent example of the type, while the latter has no claim to any special attention.

No. 4. The head presented in PLATE XIII was found May 15, 1900, a few metres to the south of the relief just described, and four days later than it. It is of Parian marble, somewhat over life size,² and in an almost perfect state of preservation. It is rather effeminate looking, but is with certainty to be

¹ Roscher, *Lex. d. Griech. und Röm. Mythologie*, I, p. 2249.

² Length of head, 0.25 m.; length of face, 0.205 m.; distance between outer corners of eyes, 0.105 m.; breadth at the ears, 0.155 m.; inner corner of eye to chin, 0.125 m.

regarded as Dionysus, as one sees by a comparison with similar heads, with the right or left arm thrown lazily over the head, which is crowned with ivy.¹ The head here described had five

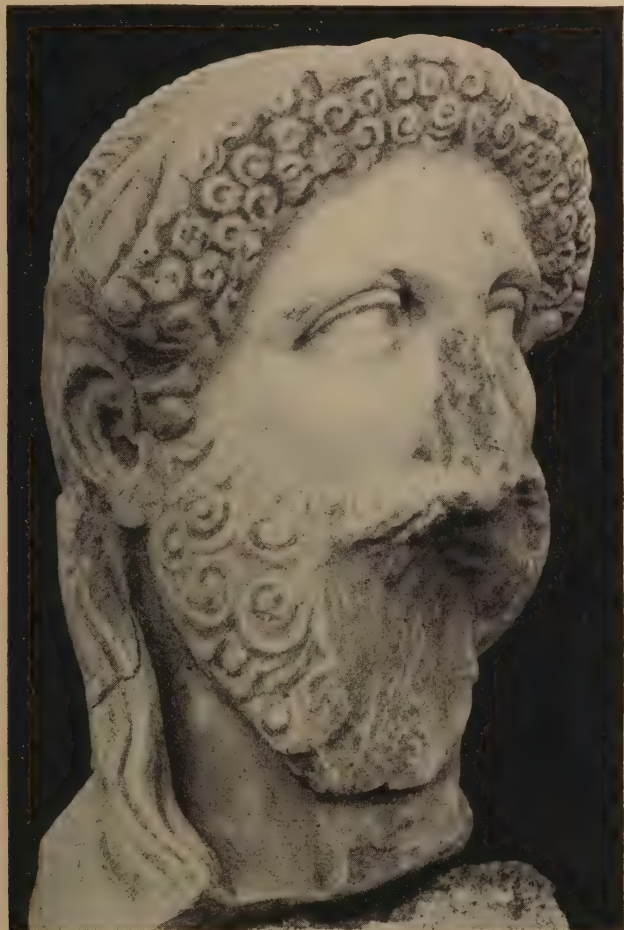


FIGURE 3. — HEAD OF AN ARCHAISTIC DIONYSUS FROM CORINTH.

¹ S. Reinach, *Repertoire de la Statuaire Grecque et Romaine*, vol. I, pp. 375-391, gives some forty heads which are very similar to this. Most exactly similar, with same position of the right arm, are nos. 1368, A, Villa Albani; 1635, A, Fitz William Museum, Cambridge; 1635, St. Mark's, Venice; and 1568, Lansdowne Collection. Other copies are given *op. cit.* II, i, pp. 112-131. One of the finest examples of the type, differing in the position of the hand, is in Woburn Abbey; Furtwängler, *Statuencopien im Altertum*, pl. vii, 1.

ivy leaves on each side of the central part in the hair; but the second one on the left side of the head has been lost. Under the first and third leaves on each side is a cluster of ivy berries. A fillet binds the hair, but appears only over the forehead. At the back, the head is practically unwrought. The long curls which fall from behind the ears over the breast and are broken away, were well worked out, as is evident from what remains. The hand which is thrown over the head must have held some object, inasmuch as two little projections extend out toward each other from the thumb and index finger.

Though every feature of the face is worked with care, and the mouth is left open for expression, there is no real breath of life here. The head will simply pass as one of the best preserved of a type already well represented.

No. 5 (Fig. 3). This head is also of Parian marble, of about life size.¹ It is of a type that by its frequent occurrence has become trite, perhaps beyond any other in antique sculpture, known as the "archaistic Dionysus." In nearly every excavation in Greece replicas are found. It is, therefore, of little consequence that the lower part of the face with most of the beard is broken off. To describe the head in detail would be uncalled for. The only merit which this copy possesses is the very careful working out of the hair and the smooth finish of the face.

RUFUS B. RICHARDSON.

¹ The lower part of the face is so broken away that it is hardly worth while to give measurements. The total height from the top of the series of curls over the forehead to the bottom of what remains of the chin is 0.165 m. It was found back of the line of shops bordering the Lechaëum road toward the north end of the system at a depth of about 2 m.

ARCHAEOLOGICAL DISCUSSIONS¹

SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PERIODICALS

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GENERAL AND MISCELLANEOUS

Altars with Subterranean Chambers. — In *Jh. Oesterr. Arch. I. VI*, 1903, pp. 123-186 (40 figs.), F. STUDNICZKA discusses a class of monuments which he explains as altars, having a small door in one side communicating with a chamber by means of which the blood was offered to the spirits of the lower world. Such was the basis of the statue of Apollo at Amyclae, which covered the grave of Hyacinthus. A similar arrangement is found over a grave at Sidyma, Lycia. Other representations are found on a vase in Leipsic, and on coins and reliefs. Of the monuments *in situ* the most important is the so-called Grave of Romulus in the Forum. This is studied at great length, and the conclusion reached, that while the archaic inscription may belong in the sixth century, the grave with the two lions, between which seems to have been an opening for the blood-offerings, cannot be dated very far from 300 B.C. A similar altar with a door seems to have occupied a place before the Greek temple in Pompeii, where is now a Roman structure. It is clearly a combination of grave and shrine, and occupies the place of the great altar. Finally, the Thasian reliefs of Apollo and the Nymphs, and Hermes and the Charites, are explained as having formed the front and back of a similar altar. The slabs with Hermes, Hecate, and the Charites were on either side of a door in the front, while the other slab, with its false door, formed the rear. It is probable that the Thasian reliefs of Dionysus and the Thyiades, and Heracles as archer, known chiefly from the sketches of Christidis, belonged to a similar altar.

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor FOWLER, Editor-in-charge, assisted by Miss MARY H. BUCKINGHAM, Professor HARRY E. BURTON, Professor JAMES C. EGBERT, JR., Professor ELMER T. MERRILL, Dr. GEORGE N. OLCOTT, Professor JAMES M. PATON, and the Editors, especially Professor MARQUAND. In Professor FOWLER's absence, these departments are conducted by Professor PATON.

No attempt is made to include in the present number of the JOURNAL material published after January 1, 1904.

For an explanation of the abbreviations, see pp. 135, 136.

Primitive European Pottery.—At the February (1903) meeting of the German Anthropological Society, H. SCHMIDT, speaking of the prehistoric pottery found at Tordos, in Transylvania, distinguished two groups, of quite different decorative systems: one, the horizontal-vertical, derived from neck and breast ornament, which he has called the Old European system; the other, the neolithic band system. Both use rectilinear patterns, but the latter is a free system, because independent of the form of the vessel; the former, limited, since its significance depends on the division between rim, neck, and shoulder. Some so-called band pottery, as that of southwestern Germany and of Troy, is really allied to the horizontal-vertical; and here belong, also, the pottery of the recently found necropolis near Smyrna, and the Aegean pottery in the pre-Mycenaean, Mycenaean, and Dipylon styles. Tattooing and body-painting are the origin of certain patterns of the band technique. (*Arch. Anz.* 1903, pp. 156-157.)

A Sun Image from Denmark.—The little group of a bronze horse dragging a disk inlaid with gold, recently found at Trundholm, Zealand (see *Am. J. Arch.* VII, 1903, p. 101), is described by W. R. PRIOR in *Reliq.* IX, 1903, pp. 267-268 (pl.; fig.). It evidently belongs to the early bronze age, is of purely Scandinavian origin, and furnishes clear proof of the worship of the solar disk during this period in the North. The group is 1 foot $1\frac{1}{2}$ inches long, and 8 inches high. The horse weighs 2640 grams; the disk, 1550 grams.

The Cahokia Mounds.—In *Rec. Past*, II, 1903, pp. 215-222 (10 figs.), H. M. BAUM describes briefly the Great Cahokia Mound and other smaller mounds on Cahokia Creek, near East St. Louis, and considers some special features of the Mound Builders' work.

Mexican Fire-gods.—*Mitth. Anth. Ges.* XXXIII, 1903, pp. 129-233 (98 figs.), contains a discussion by K. T. PREUSS of the fire-gods in the Mexican religion. The author has collected all the pictures and statements bearing on these divinities, believing that an understanding of their nature is essential for an investigation of the nature of this religion. He does not attempt to reduce his conclusions to a systematic presentation of the Mexican religious beliefs. There is little to show the influence of a volcanic country. It seems rather that the weapons of the gods, especially fire and water, are closely connected with human sins and their punishment. Sin leads to death and a descent to the subterranean kingdom of the fire-god. Fire and water are also used in symbolical form to express the sins themselves. Such a system seems to imply a belief in fire and water as elements penetrating the earth and the whole cosmos.

A Peruvian Vase.—In *Reliq.* IX, 1903, pp. 269-272 (2 figs.), is published a curious triple pot from Peru, with a decoration showing three human figures. It came from the collection of Sir Spencer St. John, at one time British Minister to Peru, and the article contains a long note by the late owner describing the discovery of these vases in the early graves. It is suggested that the three figures represent a Trinity of some sort.

EGYPT

The Use of Iron in Egypt.—*Biblia*, XVI, 1903, pp. 235-238, contains an article from *Man* by H. R. HALL on the early use of iron in Egypt. Petrie has discovered a piece of worked iron in sixth-dynasty deposits. In

1837 wrought iron was found in the Great Pyramid, and in 1882 Maspero found iron in a fifth-dynasty pyramid. Montelius's proposition that the use of iron was unknown to the Egyptians till about 1500 B.C. is thus shown to be incorrect, though it seems hard to explain its use there some two thousand years before it reached Europe.

Egyptian Inscriptions at Sinai.—In *R. Arch.* II, 1903, pp. 1–10, R. WEILL begins a discussion of the Egyptian inscriptions of the Sinaitic peninsula. These are found at Wady Magharah and Sarbout-el-Khadim, and have attracted much attention, but have never been completely published. This article gives an account of the results of the examination of the note-books of E. H. Palmer, who was one of the English expedition of 1868, and of the recovery of the squeezes made by Holland and others, which were deposited at the British Museum, but later forgotten. These contain about four hundred inscriptions, and form a nearly complete collection. Among them are some fine monuments of the Thinite period.

These monuments form the subject of a second article, *id.*, *ibid.* pp. 230–239 (5 figs.). The most important contains the Horus name, Mersekha, who is usually identified with King Samsou-Semempses of the first dynasty. In 1894 a relief with the name of Noutirkha-Zosiri of the third dynasty was found in the same region. The evidence leads to the conclusion that at that early day the kings of Abydos possessed Lower Egypt and substantially the dominion of their Memphite successors. Discoveries in Lower Egypt are cited in support of this view.

A Bronze Statuette.—In *Mon. Mém. Acad. Insc.* IX, 1903, pp. 123–133 (pl.), G. BÉNÉDITE discusses a small bronze image of a kneeling Libyan warrior, with head bent back, now in the Louvre. It is held to have formed part of a group representing the slaughter of a captive by a king,—a scene common on the larger monuments. It is part of a religious ceremony, and it seems likely that other religious duties of the king were shown in similar small groups.

The "Peoples of the Sea."—In *Ann. Brit. S. Ath.* VIII, 1903, pp. 157–189 (15 figs.), H. R. HALL discusses the early relations between Egypt and Greece, with special reference to the identity of the Ha-nebu and Keftiu. The former was originally Haâu and meant the "Fenmen" of the Delta, but under the eighteenth dynasty meant the Northerners, or peoples of the Great Green Sea, except the natives of Syria and Palestine. These peoples, however, seemed to the Egyptians to come from the islands of the west or northwest, and their definite name under the eighteenth dynasty is Keftiu, a name used under the Ptolemies to denote Phoenicia. In its earlier meaning it denoted Crete, but also, more vaguely, the other Mycenaean lands behind it, including southwestern Asia Minor and perhaps Cyprus. The "Peoples of the Sea" take the place of the Keftiu after the eighteenth dynasty, and we now find the names of individual tribes, given to piracy and raids upon the Delta. These names are analyzed and shown to belong in most cases to tribes living in Asia Minor or Crete, who must have been within the circuit of Mycenaean influence. The Keftiu seem to belong to the peaceful civilization of Minoan Crete, the later tribes to a period when continental Greece was supreme and the earlier civilization was passing away.

Arsinoë.—In *Sitzb. Wien. Akad. phil.-hist. cl.* CXLV, 1902, Abhandlung IV, C. WESSELY collects the information about Arsinoë from the numerous

papyri. He first discusses the street Ἀπολλωνίου Παρεμβολή, giving lists of the houses, residents, taxes, and slaves. Then follow, with brief comments, lists of the streets, public buildings, temples, cloisters, churches, trades, and banks.

The Temple of Augustus at Philae. — A description of this ruin, now covered by the waters of the great Nile reservoir, as it existed when excavated in 1895-96, with a list of all the stones belonging or possibly belonging to it, is given by L. BORCHARDT in *Jb. Arch. I.* XVIII, 1903, pp. 73-90 (3 pls.; 23 figs.). It was a tetrastyle prostyle with prodomos, and the cella was probably lighted from above. A broad flight of steps connects the temple with a large fore-court, which reaches to the city gate and had an altar or statue in the middle. The temple was dedicated, according to the inscription, in 11-12 B.C., and as the trilingual inscription of C. Gallus, the first Roman prefect of Egypt, was built into the foundations, it must have been begun after the death of Gallus in 26 B.C. The materials are Nubian sandstone, granite, diorite, and other stones of the country. Remains of painting are certain. The architectural forms are simple, with a leaning toward Egyptian models. The clamps and stonemasons' marks, as well as the rough attempts to repair the damage done by a severe earthquake, are worthy of notice.

Graeco-Roman Bronzes in the Museum at Cairo. — The household articles in this collection have a marked resemblance in form and decoration to the Boscoreale treasure, and show a predominance of plant forms which is Egyptian in origin, *i.e.* Alexandrine. A kind of small altar with horns at the corners, unknown in Egypt before Hellenistic times, was probably introduced from Syria. The kettle-cart, for ritual use, is very ancient. The inseting of glass for the eyes is a peculiarly Egyptian usage. The bronze articles of Coptic times continue the same types, with the occasional addition of Christian symbols. There are but few good statuettes. The gods and goddesses are generally of late work and strongly Egyptian in character. There is a strong tendency to caricature, especially of pigmies. One of the best figures is a deformed beggar, such as was doubtless often seen on the streets of Alexandria. This "impressionist" style, so modern in its effect, is the natural outgrowth of the Egyptian way of emphasizing the leading traits of any subject, omitting details. To this is also due the striking success in animal portraiture and the wonderful representations of the time of Amenophis IV, realistic in contrast to Attic idealism. A mingling of the two streams produced the κοινή of Hellenistic art. To this blended type belong some herm-figures in this collection, a beardless Dionysus, and a Roman Lar, with wide skirts and extended arms, like a ballet dancer. (F. W. von Bissing, *Arch. Anz.* 1903, pp. 145-151; 5 figs.)

Alexandrian Hexameter Fragments. — Some fragments of papyrus acquired in Cairo in 1900 are found to contain, on the verso of late second-century accounts, portions of a Greek hexameter poem, possibly an epithalamium or an epyllion if not a regular epic. The composition may be of the second century B.C., being late enough to mention Arsinoë, daughter of Ptolemy I, and certainly earlier than Nonnus. The copy is apparently meant for private use, and it presents some very unusual spellings, especially in doubling consonants, such as σστ, σσθ, κκτ, ππτ, πφθ, κγμ. which have their nearest analogy in inscriptions. There are no accents, breathings, or

other marks except an occasional punctuation. (E. J. GOODSPEED, *J.H.S.* 1903, pp. 237-247; pl.)

A Loan on Mortgage.—In *Atene e Roma*, VI, 1903, coll. 333-338, G. VITELLI publishes with a commentary a papyrus from Hermopolis (Ashmunên) containing a contract relating to a loan of 500 drachmas for five months at 12 per cent per annum. The security is the extension of a mortgage given to secure two previous loans. The document is dated between January 26 and February 24, 103 A.D.

Notes on a Latin Papyrus.—In *R. Arch.* II, 1903, pp. 257-261, SEYMOUR DE RICCI contributes some notes on a Latin legal papyrus from Egypt, published by Grenfell and Hunt in *Amherst Papyri*, II, No. 27. He supplies the fragmentary date *Const[ant. et Max.] c̄c̄ consul.*, i.e. 294 A.D., though it would be possible to fill the gap in either 300 or 302 A.D. In line 10 there is no mention of Caracalla as *Aurelio Severo*, but rather of an Aurelius Severus Alexander, to whom a constitution of 286 A.D. is addressed.

BABYLONIA

Discoveries at Babylon.—*Rec. Past*, II, 1903, pp. 273-285 (7 figs.), continues the condensed translation of the reports of the German excavations at Babylon. (See *Am. J. Arch.* VII, 1903, p. 455.) This report describes the excavations till September 28, 1900, some Canephorî from Babylonia, the paving stones of Aiburschabu in Babylon, and gives F. Delitzsch's account of the processional street of the god Marduk and the lion frieze with which it was decorated. *Ibid.* pp. 323-331 (8 figs.) contains an account of Esagila, the Babylonian Pantheon, by F. Delitzsch. The article traces the history of this "House of Heaven and Earth" from its establishment in the second half of the third millennium B.C. to its fall in the time of Xerxes.

SYRIA AND PALESTINE

Architecture in Northern Syria.—Of the publications of the American archaeological expedition to Syria in 1899-1900 (see *Am. J. Arch.* IV, 1900, pp. 415-440), the first volume to appear treats of the architecture and allied arts. The buildings of the region are so numerous that, while all public and religious buildings have been described and illustrated by plans and photographs, only a few typical houses and tombs have been included. The arrangement is first by locality—Northern Central Syria, the Djebel il-Hass and Djebel Shbêt, and the Djebel Haurân—and then by centuries, sculpture and painting being separated from architecture. Noteworthy throughout is the independence of Roman influence, and it is suggested that the architecture of Northern Central Syria is at first a reflex of the Hellenistic architecture of Antioch, and then reproduces the movements along new lines, for it is not properly decay, which characterized the first six centuries of our era. The fact that for a period of six hundred years there are dated buildings representing every decade but ten, simplifies the study of chronological development. (H. C. BUTLER, *Architecture and Other Arts*. Part II of the Publications of an American Archaeological Expedition to Syria in 1899-1900. New York, 1903, The Century Company. xxvi, 433 pp.; 397 photographs; 148 plans. 4to. \$20.)

The Bilingual Inscription from Deir el-Qala'a.—In *R. Arch.* II, 1903, pp. 225-229, CLERMONT-GANNEAU adds some notes to the bilingual inscrip-

tion from the temple of Ba'al-Marqod at Deir el-Qal'ā'a. (See *Am. J. Arch.* VIII, 1904, p. 98.) He points out that the dedicator, Ἀρχαργνός, has a purely Roman name, and that Χαγκούριος should probably be read χαλκουργός. He accepts part of Ronzevalle's discussion of the goddess Sima, and regards it as certain that in the Syrian Pantheon there existed a pair of divinities, Simios and Sima.

An Egyptian Highway. — In *Mith. D. Pal.* V. 1903, pp. 4-10 (plan), G. SCHUMACHER discusses the highways from the plain of Sharon to the plain of Jezreel. Four roads are described: three, which are certainly not ancient, briefly; the fourth, which abounds in traces of its use in ancient times, in great detail. No other road of that region shows such favorable grades from the coast to the plain of Jezreel; no other is so much travelled now; and no other is so well supplied with water. It seems certain that it is the old Egyptian military road.

A Relief from Emesa. — *C. R. Acad. Insc.* 1903, pp. 276-283 (2 figs.), contains a summary by the Marquis DE VOGÜÉ of a paper by Father RONZEVALLE in discussion of a relief from Emesa. (See *Am. J. Arch.* VII, 1903, p. 234.) The inscription is now read to contain the names of Bel, Iarhibol, Aglibol, and Semiramis. Aglibol has disappeared from the relief. Iarhibol is claimed to be a solar god, and identified with the figure on the relief wearing the costume of a Roman officer. Bel is here identified with Zeus Ceraunius, and the figure with the inscription Ἀθηνᾶ is Semiramis. As this name is due to a restoration, De Vogüé demurs to this statement. He also objects to the theory that the Palmyrean alphabet is really Syrian.

Eusebius' Account of Palestine. — In *Z. D. Pal.* V. XXVI, 1903, pp. 97-141, 145-188 (map), P. THOMSEN discusses at length the account of Palestine in the Onomasticon of Eusebius. The first part considers the date and plan of the work, the tradition of the text and the means of correcting it, emendations, including the correction of many single names, and the sources and value of the work. The second part examines the information about Palestine, divided into the statements about the physical characteristics, the deserts, water and flora, the political divisions, localities and garrisons, the population, heathen, Jews, Samaritans, and Christians, and the system of roads. The latter division is treated in detail. The conclusion is reached that the work is of great value and generally accurate, but that a critical edition of the text is much needed.

A Visit to Palestine in 1602. — In *Z. D. Pal.* V. XXVI, 1903, pp. 41-92, F. MÜHLAU publishes from a manuscript in his possession, the diary of a journey from Holland through Germany and Italy to the Holy Land and Egypt, which was taken between March 28, 1602, and June 15, 1603, by one Martinus Seusenius. Though living in Holland, he was a native of Germany, and his language, which is East Frisian, contains a large mixture of High German expressions. He seems to have been a Roman Catholic of good education, but was certainly not a priest. His book contains five maps, which are carefully described but not republished.

Jupiter Heliopolitanus. — In *R. Arch.* II, 1903, pp. 91-95 (fig.), R. DUS-SAUD continues his 'Notes on Syrian Mythology' (see *Am. J. Arch.* VII, 1903, p. 457) with a discussion of a lost copy of the statue of Jupiter Heliopolitanus, known only through its publication by Cavalleriis in 1570 (see Reinach, *Repertoire de la statuaire*, II, 322, 1). It seems to have been a

good copy, though the arms are certainly restored, and is especially interesting from the long cuirass covered with symbolic ornaments. These are discussed in some detail.

In *C. R. Acad. Insc.* 1903, pp. 384-385 (fig.), CLERMONT-GANNEAU supplements a previous article (*Am. J. Arch.* VII, 1903, p. 365) by publishing a fragment of a stone statuette from Sarba, which is a copy of the idol at Baalbek. He also adds some notes on the Löytved bronze of Jupiter Heliopolitanus.

Rock Sculptures at Nahr-el-Kelb. — In *Rec. Past*, II, 1903, pp. 195-207 (5 figs.), MRS. GHOSN-EL-HOWIE describes, with illustrations, the rock-carvings and inscriptions at Nahr-el-Kelb (Dog River), near Beyrout. These are Assyrian, Egyptian, and Roman, and seem to have all been previously published.

ASIA MINOR

The Battle-field of Issus. — At the May (1903) meeting of the Berlin Archaeological Society, Mr. JANKE gave the results of his study of the battle-field of Issus and its neighborhood, identifying most of the positions mentioned for both Persians and Macedonians. The passes through the mountains had an important influence on events. The site of Issus itself is still unknown. (*Arch. Anz.* 1903, pp. 116-118.)

The Sarcophagus of Sidamara. — In *Mon. Mém. Acad. Insc.* IX, 1903, pp. 189-228 (3 pls.; 8 figs.), T. REINACH publishes a full description of the sarcophagus of Sidamara, or Ambar Arassi (see *Am. J. Arch.* VII, 1903, p. 367), and a discussion of its place in the history of art. It belongs to a well-marked group first described by Strzygowski (*Orient oder Rom*, p. 40 sqq.), who knew six examples — a number now increased to twelve, with probably more unnoticed in museums. The decorated surface is divided into a series of niches by columns with spiral flutings, and the human figures are placed in front of or between these niches. The agreement between the different members of the group is described in detail, and finally the questions of date and origin are discussed. It is generally agreed that the great body of the examples belong to the second quarter of the third century after Christ, though the earliest is perhaps of the age of the Antonines, and the latest — a fragment of a Christian sarcophagus — may be of the end of the third century, though it has been placed in the fourth, or even the fifth. Four were found in Italy, two in Greece, two in Bithynia or Constantinople, four in the interior of Asia Minor. An examination of details seems to show that the type has arisen in Italy, and is a reaction against the reliefs of the purely Roman sarcophagus in the direction of the Greek architectural conception; but this reaction finds expression in Roman modes, the niches for statues in the façades of temples, and the old Etruscan cover in the form of a bed. The art in the details is eclectic, cosmopolitan, and in the architecture degenerate and mechanical.

GREECE

ARCHITECTURE

The House of Odysseus. — Still another discussion of the Homeric house, with special reference to the slaying of the suitors (*Od.* XXII, 126-177), adds the palace of Cnossus and the houses at Phylakopi, Melos,

to Mycenae and Tiryns as material for comparison. The conclusion is drawn that there was a passage, *λαύρη*, along one side of the hall, which opened into the hall itself by a door in the middle of the side, *ὀρσοθύρη*, and into the prodomos by another, *ὁδὸς ἐς λαύρην, στόμα λαύρης*. At this last door Eumaeus was stationed, not far from Odysseus, who stood on the great threshold of the main door leading from prodomos to megaron. The armory led off the passage at its further end, and could be reached by both parties. (G. DICKENS, *J.H.S.* XXIII, 1903, pp. 325-334; 5 figs.)

The Tholos and the Aphrodite of Epidaurus.—In *Röm. Mitth.* XVII, 1903, pp. 336-337, M. FRÄNKEL defends his somewhat late dating of the Tholos of Epidaurus (*C. I. Pel.* I, 1485), on the ground of the difference of handwriting in the great inscription, and declares the date of Pausias is too indeterminate to be of use in this question. *Ibid.* pp. 337-341, F. HAUSER replies to this defence, supporting his theory that the Tholos is the work of Polycleitus II, and not far from the beginning of the fourth century. The resemblance of the ornamentation to that of the Heraeum and the Mausoleum renders it unnecessary to adopt Dörpfeld's theory of a later execution of the designs of the architect. Personal examination has convinced Hauser that the Aphrodite of Epidaurus held a taenia in her hands, and was about to bind it on her head. This confirms his view (see *Am. J. Arch.* VII, 1903, pp. 465-466) that the original was erected in honor of a victory.

SCULPTURE

The Spirit of Greek Sculpture.—Dr. EDMUND VON MACH has published a study of Greek sculpture from the point of view of its spirit and principles. The book is addressed to students of art, but avoids a multitude of details, and aims rather at presenting the lessons which can be drawn from the systematic collection and study of the facts during the last century. The first part develops certain general considerations, such as the relation of Greek sculpture to nature, the artist and his public, the principles and technique of Greek relief sculpture, the use of color, and the conditions of the early art. In the second part the treatment is chronological, beginning with the earliest attempts, but giving most space to the realization of the noblest ideals in the art of the fifth century. (E. VON MACH, *Greek Sculpture: Its Spirit and Principles*. Boston, 1903, Ginn & Co. xviii, 357 pp.; 32 pls.; 127 figs.)

"Mourners" in Early Greek Art.—In *R. Ét. Gr.* XVI, 1903, pp. 299-322 (17 figs.), M. COLLIGNON discusses a number of early examples of mourning women. A series of terra-cottas from Boeotia, representing women with hands raised to the head in the attitude later expressive of sorrow, seems to extend from the seventh to the early fifth century. The Mycenaean figures, with raised arms and rude cylindrical bodies, are probably divinities, and in many of the primitive terra-cottas the gesture has no meaning. Such figures as the bronze statuette in Berlin, where the figure is dressed in the conventional Mycenaean costume, are probably real "mourners." In the period succeeding the Dorian invasion the type is found on the Dipylon vases, and in plastic form on the handle of an Attic loutrophoros with "Oriental" designs. It is significant that the terra-cotta "mourners" come from Boeotia, where the belief in a life in the tomb is shown by the numerous figurines representing scenes from daily life. With the advance of art the "mourners"

come forth from the grave and form part of the monument, as in the figures from Menidi and on the Sidon sarcophagus.

The Eastern Pediment of the Temple of Zeus at Olympia. — The eastern pediment of the temple of Zeus at Olympia, in its calm and lack of dramatic interest, is in marked contrast to other similar groups. This lacking element may be supplied by a new interpretation. The old man who raises his hand to his beard is perhaps a prophet who has warned Oenomaus against his fatal course, and now gives way to grief because his advice is despised. (NAVILLE, *C. R. Acad. Insc.* 1903, pp. 350–356.)

The Statues of Olympian Victors. — Dr. WALTER W. HYDE has published a study of the statues of victors at Olympia as described by Pausanias. Starting from the observation that the statues were not placed at random in the Altis, but that they were grouped according to the time of the victory, the family or state of the victor, or the nature of the contest, he has succeeded in dating many hitherto undated victors, in determining the position of their statues in the Altis, in identifying several inscriptions, and in making several ascriptions of statuary. Among these is the identification of the marble head (*Olympia, Bildwerke*, Taf. liv, 3, 4) with the Philandrides of Lysippus, thus showing that this artist worked in marble. The work contains a list of the statues as described by Pausanias, with a full commentary, a discussion of the order of this description, and a list of the statues arranged in approximate chronological order. (GUALTHERUS HYDE, *De Olympionicarum Statuis a Pausania commemoratis*. Halle, 1903, M. Niemeyer. vi, 80 pp. 8vo. 2 marks.)

The Statues from Cerigotto. — In *J.H.S.* XXIII, 1903, pp. 217–236 (4 figs.), K. T. FROST discusses five of these figures in some detail, and infers from the late and careless work, especially of the bronzes, that the cargo could not possibly be the spoils of a conqueror, but is rather a merchant's stock, made expressly for Roman purchasers. Even the Hellenistic 'Hermes,' though greatly superior to the other pieces, is an inharmonious assemblage of traits taken from various earlier models and combined without any clear artistic ideal. The crouching marble figure is probably one of a pair of astragalizontes.

Statues from Smyrna in the Louvre. — In a letter from Smyrna, November 1, 1880, Galland mentions three marble statues, a Jupiter, a headless draped female statue, and a Pythian Apollo. The latter had already been shipped to France, and it is certain that the others followed. In *R. Ét. Gr.* XVI, 1903, pp. 198–207, É. MICHON identifies these statues. The 'Apollo' is the Lycian Apollo, published by Collignon, *Histoire de la Sculpture grecque*, II, p. 303. The 'Jupiter' is the colossal Zeus of the Hall of the Caryatides in the Louvre. The third statue, restored as Juno, is still at Versailles, where the other statues were at first placed.

The Serapis of Bryaxis. — *R. Arch.* II, 1903, pp. 177–204 (pl.; 7 figs.), contains a careful study by W. AMELUNG of the statue of Serapis in the temple of Alexandria. He first examines carefully the literary evidence as to the origin of the statue, and concludes that there was but one statue in the temple, a Greek work attributed to the Athenian sculptor Bryaxis. He then gives a list of thirty-three statues and busts representing substantially one type of Serapis, excluding the multitude of little statuettes so common in Italy. The result of the examination is a reconstruction of the great cult-

statue. The head shows a marked resemblance to the Zeus Otricoli, which is commonly attributed to the end of the fourth century. Both are the work of an artist of the Attic school who had studied the works of Lysippus, *i.e.* Bryaxis. The un-Hellenic character of Cerberus as represented beside Serapis, combining a lion, dog, and wolf, surrounded by the coils of a serpent, is noted, but for its explanation reference is made to a forthcoming study by Dietrich.

Phradmon.—In *Jh. Oesterr. Arch. I.* VI, 1903, pp. 200–214, H. SWOBODA examines the date assigned to Phradmon by Mahler (*Polyklet und seine Schule*, pp. 101 ff.). He accepts the value of the epigram of Theodoridas (*Anth. Pal.* IX, 743) as sufficient to offset Pliny's date, but insists that this does not refer to events in 356 B.C., and is certainly no earlier than 344 B.C., and possibly belongs to the last years of Philip, or the first of Alexander. Incidentally it is noted that Mahler cannot be right in attributing the Aphrodite and tripod of Polyelitos at Amyclae to the victory at Mantinea (418 B.C.). They can only have been consecrated for the victory at Aegisopotami.

The Asclepius of Phyromachus in Pergamum.—In the latest excavations in the Baths of Caracalla at Rome a colossal gilded head of Asclepius was discovered, which was published in the *Not. Scavi* (1901, pp. 248 ff.) by Savignoni, and in the *Röm. Mith.* (1901, pp. 372 ff., pl. xiv). It now rests in the Museum of the Baths in Rome. In the attempt to reproduce the type of the statue to which the head belonged, Savignoni had referred to two existing statuettes. To this number W. AMELUNG now adds five more (*Röm. Mith.* XVIII, 1903, pp. 1–16, 4 figs.), and goes on to show that the head in question is surely a copy of the cult-statue of Asclepius by Phyromachus that stood in the temple of the god in the Nikephorion at Pergamum; and further that this Phyromachus was the man referred to in Plin. *N.H.* XXXIV, 84. His date can be more closely assigned than, as formerly, to the reign of Eumenes II by an inscription from Delos (cf. Collignon, *Gesch. d. griech. Plastik*, II, pp. 541 ff.). He was of Athenian origin, and had brought thence his knowledge of the especial type which originated there in the age of Phidias—at the hands of what artist, further studies may possibly reveal.

A Statuette of Aphrodite.—In *R. Arch.* II, 1903, pp. 10–20 (2 pls.; fig.), J. DE MOT publishes the torso of Aphrodite loosing her sandal, in the collection of the Duc d'Arenberg. The statue is well known from casts and descriptions (*F-W.* 1475), but has not hitherto been photographed. The statuette was found near Alexandria early in the last century, and has lost head, both arms, and the left leg below a heavy support on which the thigh rests. This type of Aphrodite was very popular, and to the lists of Furtwängler, Klein, and Reinach are added three new examples, with pictures of a fine bronze in the Numismatic Cabinet at Brussels. Two types are to be distinguished: one, confined to small bronzes, where the goddess balances herself on her right foot with no support of any kind; the other, where the left hand rests on some support, as a vase or herin. It is maintained that the latter is the original. The original statue was probably under life size and made in Asia Minor at the end of the fourth or beginning of the third century B.C., by an artist who was strongly influenced by Lysippus.

The Biadelli Medusa.—At the Burlington Club's exhibition of Greek Art in 1903 there was shown a replica of the Medusa Rondanini, which has

been for over a century in the family of Count Biadelli at Mariana in Corsica. Its earlier history is unknown. It stands next to the Rondanini mask as an example of this type, which is also represented by two heads in the Torlonia collection, and an old cast in Munich. It is not of very good workmanship and does not contribute anything to the question of the date and artist of the original. The traces of a support show that these heads were not to be suspended, but placed upright, and consequently that the eyes looked straight forward and not down. From this point of view the Rondanini head gains greatly in effectiveness. The bronze original was doubtless attached to a wall, but the heavier marble masks were placed on brackets, which the coiled serpents partly decorated like reliefs. (J. SIEVEKING, *R. Arch.* II, 1903, pp. 219-224; pl.; fig.)

The Boy with the Fox-goose.—The marble group of the boy and fox-goose (χεναλώπηξ) described by Herondas, IV, 30 f., is the subject of an investigation by R. HERZOG in *Jh. Oesterr. Arch.* I. VI, 1903, pp. 215-236 (pl.; 12 figs.). After arguing that the works of art described in the first part of the poem are to be sought between the altar and the great door of the temple, he examines the identity of this group. It cannot be the group of a boy wrestling with a goose, usually ascribed to Boëthus, for that artist probably lived after the time of Herondas, and the fox-goose is a small bird. The group is identified with one known through many examples, of which the best is one recently found at Ephesus. A boy about two years old strives to rise, reaching out his right hand for help, while with his left he presses hard upon a small goose. This identification fixes the approximate time of the origin of this group, which is of importance in the history of the development of child types. A discussion of this point is promised in another paper.

The Maiden of Antium.—In *Jh. Oesterr. Arch.* I. VI, 1903, pp. 186-200 (pl.; 8 figs.), W. ALTMANN publishes a very attractive statue in the Villa Sarsina at Antium, where it was found in 1878. It represents a maiden pausing in a movement toward the right and looking down at a platter supported on her left hand. On this flat tablet, now partly missing, were a roll, a laurel branch, and apparently a small image of a lion. After a minute and highly appreciative description of the work, it is interpreted as probably representing the *πρόμαντις* of the oracle of Apollo at Patara, to which the emblems point. The artist cannot be named. It is clear that he had nothing to do with the Praxitelean school, and any suggestion of the influence of Scopas, Bryaxis, Timotheos, or Leochares is equally absent. It seems to be a work of Asiatic art of the early Hellenistic period, but it is distinguished from other products of this school by its originality.

The Warrior Vase of Hagia Triada.—The stone vase with figures carved in relief, found in 1902 in the suburban palace of Phaestus, is one of the most important documents yet known for the life, costumes, and artistic advancement of the Mycenaean period. It shows a most lifelike procession of soldiers, marching steadily two by two, carrying long, three-pronged spears, to the shafts of which are attached sickle-shaped blades, such as might be used in assaults or in naval battles. They are led by a captain, who has long hair and wears a wide, bell-shaped cuirass; and in the midst of the files is a group of musicians—three Libyan women loudly singing a song of triumph and an Egyptian man playing the sistrum. Many Homeric

problems, especially as to armor, are explained by the details of the picture; and the general character of the work, drawing many of its features from Egyptian or Oriental sources, but treating them all in the fresh, natural European spirit, is an important aid toward realizing the still elusive art of the Shield of Achilles, an art whose origin must be sought in Crete. (L. SAVIGNONI, *Mon. Ant.* XIII, 1903, coll. 77-132; 3 pls.; 10 figs.)

An Archaic Stele.—In 'Εφ. 'Αρχ. 1903, coll. 43-56 (pl.), D. PHILIOS publishes an archaic stele found in 1901, in Athens, near the course of the old wall. It represents a nude man in the archaic running position, both hands on the breasts, and on the head an Attic helmet without cheek-pieces. The stele seems to have had an anthemion on the top, but only two Ionic volutes at the sides remain. After a somewhat full discussion of the style of the sculpture and the significance of the figure, the conclusion is reached that it dates from about 520 B.C., is the work, probably, of an Athenian sculptor who was influenced by the island schools, and represents an hoplitodromos, running a long race. The artist has omitted the shield to avoid technical difficulties.

A Victorious Athlete in Prayer.—In *R. Arch.* II, 1903, pp. 205-210, 411-412 (pl.), H. LECHAT publishes a relief of interest from its connection with the Praying Boy of Berlin. It is a small slab, found in 1884 at Nemea, by Dürrbach and Cousin, and represents a young athlete crowned with a long woollen fillet, and with hands raised in adoration. Lechat considered it sepulchral in his first article, but in the additional note describes the circumstances of its discovery and decides that it must be an *ex voto*. It is of importance as confirming Furtwängler's interpretation of the Berlin gem, and as supplying strong testimony for the restoration of the statue.

Three Sculptured Stelae.—Three Attic grave-stelae, now in the possession of Lord Newton, were brought from Greece by Mr. Thomas Legh about 1812. The first, of a size rarely found outside of Athens, is of the usual type of husband and wife clasping hands, the wife seated, the husband standing before her, and in lower relief between them a maid holding a casket. The inscription names them Melisto, daughter of Hegestratus of Oeon, and Epigenes, son of Micrion of Eleusis. Though not the finest work, it bears the marks of the great style, and is itself of about 420 B.C. The man's head is rather individual. The second is the gravestone of a young mother, Arcesis, who is shown holding her infant out before her and looking at it. The relief is in a sunken panel in the upper half of a tall, narrow stone. It is ordinary work from about 400 B.C. The third, the stone of an actor, which was published by the finder in his book of travels, might be mistaken for a votive relief but for its having been found among the tombs in the Ceramicus. A young man is seated, looking at an actor's mask which he holds in his lap. The seated position, quite like that of a woman or girl, is rare for a young man. The action recalls both the relief of a young man reading, at Grotta Ferrata, and the Hellenistic relief in the Lateran, representing an actor studying a mask for inspiration in his work, as has been suggested. (E. STRONG, *J.H.S.* XXIII, 1903, pp. 356-359; 3 pls.)

Marble Reliefs in Berlin.—Three slabs of a frieze, 0.46 m. high, of unknown origin, but formerly kept in Venice and now at Berlin, are published by R. VON SCHNEIDER, *Jb. Arch. I.* XVIII, 1903, pp. 91-93 (3 pls.; fig.). The surface of all is much worn and parts are broken off, but they

are clearly fifth-century work. The largest represents the rape of the daughters of Leucippus by the Dioscuri; on the other two, which are not contiguous to it, are five male figures in thoughtful, almost mournful, attitudes, who may perhaps be guests at the interrupted wedding. The first scene is similarly shown on a relief from the Heroön of Gjölbaschi, in a vase-picture at St. Petersburg, and probably on a frieze-slab from Cataja, which has been interpreted as an Iliupersis.

A Group of Archaistic Reliefs.—In the museum at Constantinople there is a small relief of unknown provenance, representing a seated man and woman before a *thymiatērion*, around which coils a serpent whose head is extended to a patera, held by the woman. The relief is one of a group which includes the Carapanos relief of Heracles drawing the bow, the Wilton House relief of Mantheos, and four others. They are not modern forgeries, but archaizing reliefs to be carefully distinguished from the well-known hieratic group. They probably are of a Peloponnesian origin, for they usually represent Peloponnesian divinities, and show many points of resemblance to Peloponnesian works, especially the temple sculptures of Olympia. The Constantinople relief seems to represent chthonic divinities or the heroized dead. It is poorly executed. (P. PERDRIZET, *R. Arch.* II, 1903, pp. 211–218; pl.)

Three Terra-cotta Heads.—In the *Proceedings of the American Philological Association*, XXXIV, 1903, p. xxxvii, is published an abstract of a paper by O. S. TONKS, describing three small terra-cotta heads from Asia Minor, in the National Museum at Athens. The first shows the style of Polyclitus; the second, a Heracles, is perhaps copied from the statue by Lysippus at Sicyon; the third is Scopasian.

VASES

Pottery from Zakro.—This pottery comes from two main sources, pits filled with discarded offerings from a shrine or shrines, and the ruins of houses. The former group naturally goes farther back and covers a longer period of time than the house pottery. It consists chiefly of certain types of cups and bowls that were reserved for sacred use, while the houses contain the pottery which was in use at the time the site was abandoned, about the end of the Mycenaean epoch. Besides Kamares ware of a limited number of styles, not the earliest, and the usual Mycenaean, the two often contemporary, there is a curious blending of the fabrics, with the ornament of one applied to shapes of the other, or the two kinds of ornament appearing on the same vase. Among the unpainted ware there are some vessels that have been exposed to fire, perhaps in use as *scaldini* or portable braziers. The single piece of barbotine is late and exaggerated. (R. M. DAWKINS, *J.H.S.* XXIII, 1903, pp. 248–360; 37 figs.)

Epilycus.—E. POTTIER contributes to *Mon. Mém. Acad. Insc.* IX, 1903, pp. 135–178 (5 pls.; 11 figs.), under the title 'Epilykos,' a study of Greek vases bearing this name, either as painter or as a *καλός*-name. He starts from a vase in the Louvre, having the form of two female heads, back to back, and describes with this five other vases of the same technique. The first vase bears the inscription 'Επίλυκος καλός, but it plainly belongs to the same workshop as one in Berlin made by Procles. The two vases signed by Epilycus as painter, and nine others bearing his name as *καλός*, are

described and illustrated. The conclusion is reached that this latter class belong to three or four different potteries, and that the name has no necessary reference to the painter. It is certain that the adjective does not refer to his work; and if it is applied to the painter, it only shows that in his youth he was a favorite in the Ceramicus.

Smicrus. — The works of the vase-painter Smicrus are discussed by C. GASPARD in *Mon. Mém. Acad. Insc.* IX, 1903, pp. 15–41 (2 pls.; 10 figs.). The article contains the first publication of a stamnos at Brussels, bearing the name of this artist. The scenes are connected with the symposium, and, as one of the characters is also named Smicrus, the vase probably shows the artist feasting with his friends. The other vases of this artist are a stamnos in the British Museum and a fine crater at Arezzo. Two figures, Heracles and an Amazon, reappear on an amphora in the Louvre, with the inscription *δοκεῖ Σμίκρῳ εἶναι*, which probably expresses the satisfaction of a pupil of the artist. In conclusion, the possible occurrence of the artist's name in some dedicatory inscriptions is discussed.

The Greek Vase from Susa. — In *C. R. Acad. Insc.* 1903, pp. 216–219 (fig.), E. POTTIER publishes a fragment of a vase in the form of a horse recently bought by the Louvre in Paris. It is evidently the work of the same potter as the vase from Susa (see *Am. J. Arch.* VII, 1903, p. 240), and bears the inscription *Σορ[άδες] | ἐπ[όει]*. It is probable that to him is also to be attributed the fine vase in the form of a sphinx now in the British Museum. The discovery at Susa shows he was active between 490 and 480 B.C. The new fragment was found at Capua, and was noticed by Pollak in *Röm. Mitth.* XIII, 1898, p. 87.

INSCRIPTIONS

Pre-Phoenician Writing in Crete. — *Biblia*, XVI, 1903, pp. 263–272, republishes from *Man* an abstract of three lectures by A. J. EVANS on early writing in Crete and its bearing on the history of the alphabet. After discussing early forms of writing and describing the two systems, pictorial and linear, in use in Crete, as well as the numerous isolated signs found on pottery in both Crete and Egypt, he considered the theories which derived the Phoenician alphabet from Egypt or Babylonia, and argued for the theory that the letters were derived directly from the pictorial objects suggested by their names. Such pictures are found in the Cretan forms, and if, as now seems probable, the Philistines were of this Aegean race, they may well have brought a similar system to the Phoenicians, even as Mycenaean settlers seem to have introduced the syllabary to Cyprus.

The Pre-Hellenic Inscriptions of Praesus. — The two inscriptions from Praesus, in Greek characters but unknown language, are subjected to a minute analysis by R. S. CONWAY in *Ann. Brit. S. Ath.* VIII, 1903, pp. 125–156 (2 figs.). The new *nomos*-fragment can scarcely be earlier than 400 B.C., while the alphabet of the older *barxe*-fragment does not necessarily indicate a date before 500 B.C. The writer concludes that the language (Eteocretan) is probably Indo-European, and that this may also be true of Carian. If this is correct, it indicates that the pre-Achaean population of Greece was probably Indo-European.

Religious Ordinances from Amorgos. — In *R. Ét. Gr.* XVI, 1903, pp. 154–172, J. DELAMARRE comments on two inscriptions from Arcesine

in Amorgos. Both have been published in *B.C.H.* XV, 1891, p. 592, No. 12, p. 593, No. 14, but from defective copies. The first contains a prohibition to kindle a fire in certain parts of the Heraeum. The statue of Hera is mentioned in another inscription, republished from *Ἀθήναιον*, X, 1881, p. 534, where is an account of its cleaning by a workman from Paros. The other inscription relates to the action by the Assembly in consequence of a report to the Pyrtaneis, by the priestess of Demeter Demoteles, of acts of impiety in the sanctuary. Unfortunately, injuries to the stone conceal the exact nature of the offence and the proposed action by the people.

Two Attic Decrees. — In *Ἐφ. Ἀρχ.* 1903, coll. 61-72, K. D. MYLONAS publishes two inscriptions found in the stoa of Attalus. The first is a vote of the Senate in honor of the treasurer of the prytany and other officers. It is probably of the first half of the second century B.C. The second is *C.I.A.* II, 592, found by Pittakis, but later lost, until rediscovered in a modern wall. The new copy corrects in some details the text of Köhler.

Botrys, the Bronze-founder. — In a Rhodian inscription (*C.I.G. Ins.* I, 106 = *S.G.D.I.* III, 3826) occur the words Βότρης Λευκανὸς ἐχαλκοῦργησε. This is the only mention of a bronze-founder on the base of a Greek statue, but even more surprising is the apparent mention of a Lucanian as a worker in metal at Rhodes. In *R. Ét. Gr.* V, 1903, pp. 389-390, P. PERDRIZET maintains that Botrys is rather to be considered a native of one of the numerous Greek towns named Λεύκη or Λεύκαι.

Catalogi Paterarum Argentearum. — In *Ann. Brit. S. Ath.* VIII, 1903, pp. 197-230, M. N. TOD discusses the group of inscriptions belonging to the latter part of the fourth century B.C., in which is recorded the dedication of a silver phiale, weighing one hundred drachmas. These seem to have been given generally by freedmen who had been acquitted in a δίκη ἀποστασίον, though sometimes by a successful master, and are probably to be regarded as a fee to secure a public record of the result of the suit. The inscriptions are also of interest for the light they throw upon the trades and other occupations of the freedmen. After a full treatment of this subject, seven fragmentary lists from the Epigraphical Museum at Athens are published.

The Date of an Elean Inscription. — In *R. Ét. Gr.* XVI, 1903, pp. 143-153, G. GLÖTZ discusses the date of the well-known Elean inscription, *S.G.D.I.* 1152. He maintains that it is earlier than 580 B.C., basing his argument entirely on the mention of a single Ἑλλανοδίκας. He holds that when the number of these officers was increased to two in 580 B.C., they were restricted to those functions in connection with the Olympic games, which we know were the sole duties of the board of nine after 480 B.C.

Monumental Epigrams. — In *Jh. Oesterr. Arch.* I. VI, 1903, pp. 241-247 (facsimile), E. BORMANN discusses several epigrams from monuments of the fifth century B.C. In *C.I.A.* I, 333, the first distich refers to the battle of Marathon; the second and third distichs refer to Salamis, with probably a reference to Thermopylae, and were engraved on the restoration of the monument after the retreat of the Persians. It was imitated by Ion of Samos in the epigram on the base of the statue of Lysander in the monument for Aegispotami at Delphi. In the epigram (Diod. XI, 62), composed after Cimon's victory in Cyprus, the last four lines are genuine. The first line was used on the monument of a Lycian prince at Xanthos, near the end of the fifth century. Several cases of expansion of an original couplet are

discussed. In general the motive seems to be to add information for the reader which was originally conveyed through the monument itself.

Notes on Various Inscriptions.—In *R. Ét. Gr.* XVI, 1903, pp. 180-192, and p. 419, T. REINACH publishes a number of Greek inscriptions, new and old. Six are epigrams, two from Thasos, and four from Egypt. Five of these are epitaphs, and one a couplet inscribed in the necropolis of Thebes by a visitor from Delphi. Two others are from Rhodes, and occupy different faces of the same block. On one face are two decrees of condolence. The other bears the dedication of a statue erected to a certain Menodorus by the ἐπίδαμασται. It was the work of an hitherto unknown Ζήνων Ἀμυσσηνός. The last part of the article is a commentary on two Elean inscriptions; the bronze published by Szanto, *Jh. Oesterr. Arch.* I. I, 1898, p. 197, and the fragment *Inschriften von Olympia* No. 4. In the former, the words φενγέτω ποτῶ Διὶ τὸ λυπῖόν αἵματος are rendered "shall be put on trial in the name of Olympian Zeus as guilty of blood." The law contains a prohibition of the proscription of families, but the amnesty does not cover deeds precedent to the year of Pyrrhon, which is perhaps 343 B.C. The second inscription is understood to contain a law for protecting the sanctuary at Olympia from fraud on the part of those who sell lands of which they are not the owners.

In *R. Ét. Anc.* V, 1903, pp. 205-230, M. HOLLEAUX publishes notes on the following inscriptions: *C.I.G.* 3595 (= Dittenberger, *Sylloge*, 156) the Sigaeum inscription; *Revue de Philologie*, XXV, 1901, p. 126; HAUSSOULIER, *Études sur l'histoire de Milet et du Didymeion*, p. 34, p. 106, note 3; *B.C.H.* XIII, 1889, p. 232, No. 2; XXV, 1901, p. 355, No. 4; MICHEL, *Recueil*, 475, 1011, 291; KERN, *Inschriften von Magnesia*, Nos. 49, 50, 58, 59 b, 72, 73 a, 78, 85, 90, 92 a, 94, 97 (I), 103, 104; HICKS, *Inscriptions of the British Museum*, III, 441 (= MICHEL, *Recueil*, 431), three decrees of the Rhodians in favor of Iasos. The article concludes with an index of all the inscriptions commented upon by Holleaux in this and two preceding articles (*R. Ét. Anc.* I, 1899, pp. 7-18; III, 1901, pp. 115-130).

GENERAL AND MISCELLANEOUS

Cretan Chronology and Writing.—The *Nation*, December 31, 1903, has a summary of certain lectures at Oxford and before the British Academy by A. J. EVANS. In one he endeavored to fix certain points in the chronology of Minoan Cnossus, chiefly by the evidence of intercourse with Egypt. The latest period is "geometric," of about 1000 B.C. The next is late Mycenaean, about 1500 B.C. Next comes a period of marvellously perfect designing, of about 2000 B.C. or earlier. Before this lies beautiful egg-shell pottery, and still earlier are stone imitations of the stone vases of the fourth dynasty in Egypt or even earlier. Further study of the Cretan script has led to corresponding distinctions here. The pictographic alphabet shows affinities through Cretan seals with Egyptian signs of the sixth dynasty and earlier. Contemporary with the earlier palace is the development of a linear script, which seems to arise about 3000 B.C. This is succeeded by a second linear script, in some ways an improvement, from which are derived the cursive markings on vases. Several more groups of signs have been identified, as well as masculine and feminine terminations. A summary of the paper before the Academy is published *Athen.* December 5, 1903.

Excavations at Cnossus.—In *Ann. Brit. S. Ath.* VIII, 1903, p. 124 (3 pls.; 74 figs.), A. J. EVANS gives a somewhat detailed report of the excavations at Cnossus in 1902. A brief report from the Cretan Exploration Fund was published in *Am. J. Arch.* VII, 1903, pp. 117–118. The new report adds little to the facts there stated except in the more minute description and illustration of the arrangement of the palace, the structural systems employed, and the smaller objects found. Among the latter are fragments of a shallow bowl of translucent diorite, and of one of liparite, a volcanic glass from the Aeolian Islands. The profiles of these bowls are those characteristic of diorite vases of the fourth Egyptian dynasty (4000–3700 B.C.). They therefore confirm the theory of intercourse between Crete and Egypt at this early period. The Cretans apparently supplying Egypt with the Aegean and Italian obsidian, and receiving Egyptian products in exchange.

Palaeokastro.—In *Ann. Brit. S. Ath.* VIII, 1903, pp. 286–316 (7 pls.; 27 figs.), R. C. BOSANQUET publishes the detailed report of the first campaign at Palaeokastro in 1902. (See *Am. J. Arch.* VII, 1903, pp. 118–119.) It merely adds details and illustrations to the summary already published. Noteworthy are the “bone-enclosure” of the Kamáres period, and a very fine larnax of the Mycenaean period, with remarkable decorations, including a painting of a slender column supporting a double-axe between a pair of “sacred horns.”

Phaestus, 1900–01.—In these two years the general character of the remains on the three summits of the hill of Phaestus was ascertained and the Mycenaean palace on the wide, low, eastern portion, with the various stages of occupation that preceded and followed it, was thoroughly investigated. This part of the hill sloped somewhat steeply down toward the south, and the earliest, neolithic, remains are near the foot. Above are Kamáres and older Mycenaean remains, while the great palace, of a second Mycenaean period, occupied four different levels, partly artificial, well up toward the summit. With the exception of Cnossus, this is the most extensive and magnificent residence of the epoch known, and being planned with great skill as a consistent whole, it shows amazing architectural ability. It was not fortified. In several parts there was clearly a second story. The inner walls were stuccoed, and benches ran around the walls in some rooms. There is one large open court, another older one, perhaps used for religious ceremonies or spectacles, three megarons, a set of magazines, offices, bath-rooms, a shrine, and some magnificent and most impressive flights of steps. The vertical front of the bench in one room has a decorative structure that is evidently the precursor of the Doric triglyph frieze. Among the smaller objects are bits of painted stucco, vases of different epochs, including all kinds of Mycenaean ware, idols, figures of animals, a votive hut similar to the *capanna* urns of Italy, a relief on shell of four animal-headed demons engaged in a religious ceremony, and building stones with letters or signs, both linear and pictographic. The palace lasted to the downfall of Mycenaean power, and was succeeded by houses of the geometric period which destroyed much of the earlier remains, then by an Hellenistic city which flourished until destroyed by the Gortynians about 200 B.C. The Roman and Byzantine periods were unimportant. (L. PERNIER, *Mon. Ant.* XII, 1902, coll. 4–132; 8 pls.; 55 figs.)

Mycenaean Remains from Hagia Triada.—The campaign of 1902 of the Italian mission in Crete was devoted to the high western summit of

the hill of Phaestus, overlooking the plain toward the sea. The building on this spot, a villa or summer residence, contemporary with the main palace on the lower hill but less splendid, is as yet only partially explored, but the finds are too important to await the publication of a complete report. They include stone vases and basins, terra-cotta vases and figures, bronze utensils, and above all a number of inscriptions on tablets and clay seals. The last, found in one spot, are probably the remains of some sort of archives kept on a perishable material such as palm-leaves. The signs are chiefly linear, and are largely such as are already known at Cnossus or elsewhere. Some are strikingly like the later Greek letters. The pictorial seal designs are chiefly religious subjects. One room contained frescoes, of which enough remains to show the style—vigorous and pleasing designs from the native floral and animal life, less closely imitated from Egyptian models than similar work at Cnossus. The Mycenaean seated goddess also appears, here clad in particolored pantalettes. Among the terra-cotta vases is one with triton-shells on a background of seaweed. The terra-cotta figures are idols, heads of human figures, probably of the native type, and two small busts of an African type, like the Rebu or Libi of Egyptian frescoes. (F. HALBHERR, *Mon. Ant. XIII*, 1903, coll. 5-74; 11 pls.; 57 figs.)

Praesus in 1901.—The *Ann. Brit. S. Ath.* VIII, 1903, pp. 231-270 (6 pls.; 36 figs.), contains the full report of the excavations at Praesus in Crete, in 1901, by the British School at Athens. (See *Am. J. Arch.* VI, 1902, p. 72.) R. C. BOSANQUET reports the traces of early occupation found in a cave, which yielded the only neolithic and Kamáres ware, a megalithic house, which contained no painted ware, though Mycenaean pottery was found not far away, and a series of tombs, bee-hive and shaft, which for the most part belonged to the geometric period, though two had been used in Mycenaean times. On the third Acropolis was found a mass of votive offerings around a primitive altar (see Halbherr, *Am. J. Arch.* V (1901), pp. 375-384), among them bronze models of armor, and many terra-cottas. On the slope of the first Acropolis was a large Hellenistic house.

Ibid. pp. 271-281 (2 pls.; 7 figs.), E. S. FORSTER describes the terra-cottas. Among those from the altar hill the most important is the bust of a young god in archaic style, of the first half of the fifth century B.C.; noteworthy is a series of lions, in some cases of very large size. A series of plaques from Vavéloi extends from the archaic period to about 400 B.C.

Greek Sacrificial Ritual.—The ancient custom, known from Ilian coins and various literary allusions, of raising a victim entirely off the ground (*αἶρεσθαι*) before striking the death blow, seems to belong originally to sacrifice to Olympian deities. The opposite act, pressing the animal upon the ground (*καταστρέφειν*), as in the sacrifice scenes with Nike or Mithras, is a part of Chthonian ritual. Demeter, as an Olympian goddess, was worshipped with the former rite, even at Chthonian Eleusis. (H. von FRITZE, *Jb. Arch. I.* XVIII, 1903, pp. 58-67; 13 figs.)

Mystic Vannus Iacchi.—The classical winnowing implements and their ritual use thus referred to by Virgil (*Geor.* I, 165) are discussed by Miss HARRISON in *J.H.S.* XXIII, 1903, pp. 292-324 (18 figs.). The *λίκνον* or *vannus* was a basket with one side open, in which the grain was shaken and so separated from the sticks and chaff, which fell out of the open side. The *πτύον* or *venilabrum* was a wooden or iron shovel for throwing the grain

into the air to be separated by the wind, and a form of it with three or more prongs for taking the grain more easily from the heap was the *θρῖναξ*. All of these implements have been retained to the present day in some primitive countries. Only the *λίκνον* or basket had a mystical use, in the rite of initiation and in the similar sacrament of marriage, and it symbolized both purification and fruitfulness. These two significations had an historical as well as a spiritual connection, because when Dionysus was promoted from a Thracian beer-god, whose province was the care of grain, to a wine-god, his grain basket became a grape basket.

The Raft of Odysseus.—At the June (1903) meeting of the Berlin Archaeological Society, Mr. ASSMANN, speaking of the *σχεδία* of Odysseus, said that such a raft, with seat or bridge supported on uprights, is in use among the Brazilians. The use of rafts in the ancient world as well as in the modern life of the same lands, is confined to Babylonian, Arabic, and Lower Egyptian regions. No satisfactory explanation of *σχεδία* as a Greek word being known, the name as well as the thing may be of Oriental origin. (*Arch. Anz.* 1903, pp. 120–121.)

Χεῖρες.—On the balustrade of the temple of Athena at Pergamum, among other armor are represented brassards, covering the arm and wrist. These are described by Xenophon (*Περὶ ἵππικῆς*, § 12) under the name of *χεῖρες*, as worn by horsemen. They seem to be represented also on staters of Datames (c. 375 B.C.), where the seated figure, examining an arrow, is thus shown to be a horse-bowman. (R. SCHWAB, *R. Ét. Anc.* V, 1903, pp. 247–248; fig.)

Notes on the Greek Foot-race.—In *J.H.S.* XXIII, 1903, pp. 261–291 (15 figs.), E. N. GARDINER discusses the three forms of foot-race in the Greek athletic contests, with special reference to the views of Dr. Hauser and M. de Ridder. The stadium or sprint, the diaulus or long-distance run, and the armed race, which was less serious than the others and may have had many variations, were all started with the feet rather near together, the lines on the sills in the extant stadiums being from four to seven inches apart. The position, with both knees somewhat bent and one arm held forward, is shown on a number of vase-pictures, but some similar representations are really jumping positions, and others are humorous palaestra scenes. A whole series of attitudes, preparation for the start, the start, the course, various stages of the turn in the diaulus, the finish, victory, can be made up from different vases. The subject needs to be considered with an appreciation of the ever-present humorous side of Greek life.

The Pheidonian Standard.—An inscription of Delphi of about 361 B.C. mentions a contribution from Apollonia in Epirus of three thousand Pheidonian medimni of barley to the new temple. This is stated to be equal to 1875 Delphian medimni. Neither of these systems can be the same as the Attic, and the probabilities are strongly in favor of the identity of the Eginetan and Delphian standards. In that case the medimnus of Pheidon is equal to 45.46 litres. This is confirmed by the table of standards from Gythium, where the *ἡμίεκτον* (one-twelfth of the medimnus) contains about 3.8 litres. This is one and one-half times the Babylonian *maris*. In this table the *χοῦς* is exactly one-third of this medimnus. It would seem, then, that the system of Pheidon was an endeavor to provide the same unit for dry and liquid measure. It failed, and this medimnus became almost exactly

the mean between the new medimnus and the new metretres. (É. BOURGUET, *R. Arch.* II, 1903, 25-28.)

The Phocaeen Thalassocracy.—In *R. Ét. Anc.* V, 1903, pp. 317-327, C. JULIAN points out how direct Greek influence could have been exerted in the region of Elche. Near the end of the seventh century the Phocaeans seem to have reached the mouth of the Guadalquivir and established friendly relations with Arganthonius, king of Baetica. They turned from this region, probably because of Carthaginian hostility, founded Massilia, and established posts along the coast of southern France and eastern Spain, as well as at Alalia on Corsica. Thus during the first half of the sixth century they were masters of the Mediterranean from Spain to Italy. Their downfall followed the capture of Phocaea by the Persians and the great naval victory of the Etruscans and Carthaginians in 535 B.C. After this, Carthage and the Iberians gradually expelled the Greeks from the coast of Spain. *Ibid.* pp. 327-328, G. RADET suggests that the aid given by Arganthonius to the Phocaeans was rendered at the time of the war between Alyattes and Cyaxares, the Mede, and later transferred to the time of the Persian attack upon the city.

Cicero's Appreciation of Greek Art.—An examination of Cicero's works shows that, while he was keenly appreciative of Greek literature, his knowledge of Greek art was superficial, and his references to its various forms proceed rather from his instinct as a stylist than from any enthusiasm for the art itself. (G. SHOWERMAN, *Proceedings of the American Philological Association*, XXXIV, 1903, pp. xxxv-xxxvii.)

Travels in Greece.—Professor R. B. RICHARDSON, formerly Director of the American School of Classical Studies at Athens, has collected in a volume, with some alterations, a number of articles descriptive of journeys in the less-visited parts of Greece. Among the places described are Corfu, Ithaca, Delphi, Dodona, Acarnania, Aetolia, Taygetos, Stymphalus, the Styx, Messene, and Pylos. Other chapters deal with the ascent of Kiona, the highest mountain in Greece, and the bicycle in Greece. One object of the book is to convey to those who have never visited Greece something of the fascination of the country. The illustrations, from photographs, include a number of views not easily accessible. (R. B. RICHARDSON, *Vacation Days in Greece*. New York, 1903, Charles Scribner's Sons. xiv, 240 pp.; 2 maps; 16 pls. 8vo.)

The Reproduction of Mycenaean Objects.—In *Arch. Anz.* 1903, pp. 157-162 (7 figs.), is a description of the originals in gold, silver, and bronze from which Gilliéron's admirable galvano-plastic reproductions are taken. They are chiefly goblets, sword blades, personal ornaments, animal heads, etc., from the shaft graves at Mycenae. The purpose of the article is to show exactly how much in the reproductions is restoration.

ITALY

ARCHITECTURE

Roman Decoration of Vaulted Ceilings.—An architect, KONSTANTIN RONCZEWSKI, has published a discussion of the systems of decoration employed upon Roman vaulted ceilings, with special reference to the division of the ornamentation. After a brief account of the common coffered ceiling, he considers at some length the stucco decoration of barrel and intersecting

vaults. Plastic decoration of spherical vaults, painted decoration of cylindrical vaults, and finally the decoration of spherical vaults by painting and mosaic are also described. The majority of the numerous illustrations are from the author's drawings, and represent almost exclusively remains in Rome and Pompeii. (KONSTANTIN RONCZEWSKI, *Gewölbeschmuck im römischen Altertum: Studien und Aufnahmen*. Berlin, 1903, Georg Reimer. VI, 46 pp.; 31 pls.; 35 figs. 4to. 12 marks.)

Temple Remains in Central Italy. — In *Röm. Mitth.* XVIII, 1903, pp. 141-163 (8 figs.), R. DELBRÜCK gives, professedly for the chief benefit of other archaeological travellers, brief memoranda on the situation and condition of ruins, chiefly of temples, of the time before the Roman empire, as he found them in the course of an archaeological journey made for the purpose through many towns of Central Italy in the summer of 1903. A further description, with diagrams, is appended of a number of Doric capitals and other architectural members that he found and studied.

An Old Column in Pompeii. — In *Röm. Mitth.* XVII, 1902, pp. 305-310 (pl.), A. MAU discusses an archaic column, which was enclosed in a wall in the house Reg. VI, Ins. 5, No. 17-18, in Pompeii. The wall was decorated in the first style, *i.e.* during the second century B.C., but the column is evidently of far earlier date. Its level and orientation show that the building to which it belonged was built before the town was laid out on its present plan. But this plan is earlier than the limestone buildings, and, as it can scarcely be attributed to the Samnites, must be earlier than the fall of the Etruscan power, about 400 B.C. If Capua were founded about 600 B.C. (Hülse in *Pauly-Wissowa*, III, 1556), it is probable that this column belongs to an early Etruscan structure, which was swept away, with all its fellows, to make room for an entirely new town.

The origin and meaning of the column are also discussed by G. PATRONI in *Rend. Acc. Lincei*, 1903, pp. 367-384 (fig.). He agrees with Mau that it is very ancient, dating from a period of very solid construction, the remains of which have so completely disappeared only because of a general demolition and reconstruction of the city. He does not agree with Mau in the analysis of the artistic elements of the column. The Etruscan characteristics are undeniable, but the base is Mycenaean. The form of the column is original; it has not been cut down on account of injury. It illustrates the period of transition from constructions of wood to those of stone, reproducing in its lower part the connection between the wooden shaft and the stone base. The writer then discusses the origin of echinus, abacus, and entasis. He concludes that the reconstruction (*piano regolatore*) of Pompeii was due to the Etruscans and occurred in the middle of the eighth century B.C. The column dates from the end of the ninth century.

A Pompeian Wine-press. — In *Röm. Mitth.* XVII, 1902, pp. 311-316, A. MAU describes a tavern with wine-press and *cella vinaria*, the first found inside the city of Pompeii. The house, which had two stories, is described in detail. The wine-press was small and had no arrangements for the press-beam. It seems that here the pressing was done by heavy stones, the grapes being placed on a clay plate with a low edge. The press was under cover, but the *cella vinaria*, in which were eight *dolia*, had no roof, the upper story having been removed in ancient times. In the house were found numerous unimportant objects.

The Round Temple on the Tiber.—C. HÜLSEN has found the earliest mention of the round temple near the Ponte Rotto in a bull of Pope Innocent II, of October 27, 1140, where it appears as the church of *S. Stephanus rotundus*, which had been in the wars of a few years earlier. In the same document is mention of certain *gradellae*, which seem to be steps leading down to the Tiber, probably the same as the *gradus* of *C.I.L.* VI, 31602. (*Röm. Mitth.* XVII, 1902, pp. 342-343.)

SCULPTURE

Statue of a Charioteer in the Vatican.—Doubts as to the meaning of the cords wound around the body of a Roman charioteer in the Vatican museum should be set at rest by certain passages of Galen, who explains the use of such bands to brace the ribs, *συνσχῆς χάριν τῶν πλευρῶν*, and by one of Soranus, also a medical writer of the second century, where a similar description is given and illustrated by a figure resembling the Vatican statue. (H. SCHÖNE, *Jb. Arch. I.* XVIII, 1903, pp. 68-71; 2 figs.)

The Curtius Relief.—The relief in the Palace of the Conservatori, representing a falling horse and rider, has been declared a work of the early Renaissance by Helbig, while Furtwängler has lately maintained its antique character. This view is sustained by C. HÜLSEN in *Röm. Mitth.* XVII, 1902, pp. 322-329 (3 figs.), who argues that it is the copy of a relief which once stood near the Lacus Curtius, and probably gave rise to the whole story of Marcus Curtius. Furtwängler, however, is wrong in supposing that the relief is contemporary with the inscription on the reverse of the stone. The latter is probably of the Augustan time, but the former is not placed symmetrically on the stone and seems to date from the extensive restorations of the time of Diocletian. It is of especial interest as the copy of an original work of early Italian art. It is hoped that it may soon be removed from its present unfortunate position.

The Drunken Silenus from Herculaneum.—In the 23d Winckelmannsprogramm of Halle (1899) C. Robert had interpreted this relief as depicting the exhausted Silenus, wandered from the train of Dionysus to the Athenian Acropolis, and cared for there by the daughters of Pandion (Paus. I, 23. 5). K. HADACZEK, in the *Röm. Mitth.* XVIII, 1903, pp. 58-62 (2 figs.), compares it with two previously unpublished Roman reliefs, one now in the Agram museum, the other in that of Arezzo, and points out that all three come from some Greek original, and, lengthened or shortened to suit, found a place in the decoration of Roman sarcophagi. Silenus lies upon a mantle, too drunk to rise, and points a helpful nymph to a nearby capacious vase of wine, asking her to fill his cup again for him.

PAINTING

Roman Wall-painting.—In *Röm. Mitth.* XVIII, 1903, pp. 87-140 (3 figs.), E. PETERSEN takes up the cudgels again in further criticism of the contention of A. MAU (*Röm. Mitth.* XVII, 1902, see *Am. J. Arch.* VII, 1903, p. 480), that the central pictures in such wall-decoration as that common in Pompeii were conceived as paintings hung upon the wall, or as parts of a screen, and proceeds to substantiate by detailed interpretation (referring especially to the Ara Pacis Augustae and to the paintings from Boscoreale) his own view that the starting-point of such decoration could

have been only in the conception of the wall-surface as lying to the rear of the (painted) architectural elements and as being cut through to show views outside of and beyond it.

INSCRIPTIONS

Alphabet-monuments. — In *Röm. Mith.* XVIII, 1903, pp. 73–86 (4 figs.), C. HÜLSEN publishes a marble slab from the magazine of the Naples Museum that shows a carefully executed Latin alphabet (of twenty-three letters) in the style of the early part of the second century of our era, arranged in four lines, and flanked on either side by a crested serpent rampant. These serpents indicate that the inscription has a sacred character, and specifically that it concerns an eastern cult. Such alphabetic formulae of mystic purpose have thus far been shown to appertain only to the worship of Jupiter Dolichenus; and as this inscription came from the De Criscio collection at Pozzuoli, where the worship of that deity is known to have existed, the attribution of this inscription to the same cult is reasonably certain.

The greater part of the paper is taken up with a detailed refutation of A. DIETERICH's sweeping claim (*Rhein. Mus.* LVI, 1901, pp. 77–105) that all such inscriptions are magical in character and can be traced from earliest to latest times. HülSEN points out conclusively that, so far as Latin inscriptions are concerned, these alphabetic formulae are sometimes for a practical purpose (safety-locks), sometimes mere models of the stone-cutter's art, or examples for practice, sometimes school-boy scrawls, sometimes naïve decoration, and that only a few have any definitely mystic character, — these last being all connected with the Dolichenus cult, — introduced into Rome from the East in late imperial times.

An Altar to Hercules in Elba. — Dr. FRITZ LITTIG publishes in *Röm. Mith.* XVIII, 1903, pp. 63–67 (fig.), a votive altar to Hercules Sanctus, erected by P. Acilius Attianus, praetorian prefect under Hadrian, and found in 1899 near the mouth of the Fosso dell' Inferno, in the western part of Elba. C. HÜLSEN adds a note on the prefect, and on the error of the *Thesaurus Linguae Latinae* (II, 1168) in classifying nearly all the proper names in *Att-* together as of Latin origin.

Stationarii. — In *Röm. Mith.* XVII, 1902, pp. 330–335, A. VON DOMASZEWSKI publishes an inscription from Aveia, in barbarous Latin, containing a dedication by a certain Aurelius Mucatra, a *stationarius* of the *legio II Parthica*. *Statio*, in military language, is the "main guard," at the gates of the camp, the general's tent, and later at the palace of the emperor. Under the empire any detachment occupying a separate post could be thus designated, but the term was later confined to the posts doing police duty in the interior, especially at points where several roads met. The larger districts were in charge of centurions. The inscription of Aveia seems to belong to the time under Philip, when brigandage in Italy called for increased forces.

A Forged Portrait and Inscription. — In the *Festschrift für O. Hirschfeld* F. STUDNICZKA endeavored to show that the inscription and bust of a Stoic philosopher, L. Junius Fufficius, known only from the copy of Pirro Ligorio, were genuine. In *Röm. Mith.* XVII, 1902, pp. 317–321, C. HÜLSEN discusses the question anew, pointing out the faults in the language, and indicating the sources from which the forger derived his material.

Inscriptions relating to Roman Antiquities.—In *R. Arch.* II, 1903, pp. 143–176, R. CAGNAT and M. BESNIER republish one hundred and eight inscriptions, of which twenty-eight are Greek, relating to Roman antiquities. They also make brief mention of articles and works relating to Latin epigraphy which appeared between March and June, 1903.

COINS

Variant Types of Roman Coins.—In the *American Journal of Numismatics*, XXXVII, pp. 104–109 (pl.), G. N. OLCOTT publishes five Roman coins from his collection, presenting variants of the types described by Babelon and Cohen. These are a denarius of *C. Egnatius Maximus* (c. 69 B.C.), a double dupondius of Augustus (struck after his death), a dupondius of Germanicus (struck by Caligula), a sestertius of Titus (80 A.D.), and a sestertius of Nerva (98 A.D.). He also gives a list of fifty-eight coins in the possession of an Italian at Paterson, N.J., who had found them near Muro Lucano (Potenza). They are not of special rarity, and the Roman coins to which a date can be assigned extend from about 129 to 43 B.C.

Coins of Sicily.—F. S. BENSON is publishing, in the *American Journal of Numismatics*, a series of articles on 'Ancient Greek Coins,' with illustrations. Vol. XXXVII, pp. 33–39 (pl.), is given to nine Syracusan coins of the period from 263 to 212 B.C. *Ibid.* pp. 97–100 (2 pls.) describes five coins of Acragas (472–406 B.C.) and one of Eryx (415–400 B.C.). Vol. XXXVIII, pp. 33–39 (pl.), is an account of four coins of Gela, from before 466 to 405 B.C., and five of Himera, from before 482 to 409 B.C.

GENERAL AND MISCELLANEOUS

An Ivory Situla.—In *Mon. Mem. Acad. Insc.* IX, 1903, pp. 5–13 (pl.; fig.), M. COLLIGNON discusses an ivory situla from Chiusi now in the Louvre. It was first described by Helbig in 1878, who regarded it as Carthaginian. More recently (1896) Karo declared it a work of ancient Ionian art, belonging to a group of "Ionian ivories." The decoration consists of two bands of animals, including sphinxes, a griffin, a horse and rider, a stag, and others. The types certainly are derived from Ionia, but there is no evidence that the ivories were carved there. In fact, the very evident imperfections in execution justify the belief that it is an Etruscan work of about the beginning of the sixth century B.C.

The Capitoline Bisellium.—The bronze couch in the Palace of the Conservatori is described in Helbig's *Führer* (No. 569) as a *bisellium*. The arms, however, are inconsistent with this theory. The error is due to a bad restoration. A bed recently brought to Berlin from Boscoreale shows, what is confirmed by many other monuments, that this *bisellium* should be restored as a couch with head- and foot-pieces. The reputed *bisellia* from Pompeii in the Naples Museum owe their shape to restorations, and were probably couches. (W. AMELUNG, *Röm. Mith.* XVII, pp. 269–276; 3 figs.)

The Treasure of Boscoreale.—The genuineness of the treasure from Boscoreale in the Louvre having been called in question, the restorer, M. ALFRED ANDRÉ, wrote a letter to *Le Temps* (September 26, 1903) describing briefly the appearance of the pieces when they came to his hands, stained and covered with cinders, many of the handles and decorations detached by the disintegration of the solder, and some pieces seri-

ously threatened by the decomposition of the metal into chloride of silver. The letter is given in full in *R. Arch.* II, 1903, pp. 342-343.

The Via Caecilia. — In *Röm. Mitth.* XVII, 1903, pp. 277-304 (2 figs.), N. PERSICHETTI concludes his discussion of the course of the Via Caecilia. (See *Am. J. Arch.* III, 1899, pp. 320-321.) The course of the road is traced from Porcinaro, down the valley of the Vomano, to Montorio. From Montorio it passed to the valley of the Mavone, and thence to the valley of the Tordino at Teramo. From this point it followed the river eastward, reaching the sea at Giulianova. The total length from Rome to Castrum Novum would be about 148 Roman miles. In the course of the discussion it is pointed out that the "Valle Siciliana," near Montorio, known by this name in literature since the sixteenth century, should be called "la Cecilia," a name still in use in the region.

The Etruscans in Pompeii. — *Atene e Roma*, VI, 1903, coll. 302-309, contains an article by G. COSENZA summarizing recent discussions on the presence of the Etruscans in Campania, and especially Sogliano's arguments, drawn from the evidences of Etruscan influence in the plan and older buildings of Pompeii. The author is a firm believer in Sogliano's views, and regrets that Mau has not referred to his work in discussing the early column (*supra*, p. 317).

Sibylline Prophecies of the Destruction of Pompeii. — At the May (1903) meeting of the Berlin Archaeological Society, Mr. HERRLICH spoke of the Sibylline prophecies of the outbreak of Vesuvius in 79 A.D., which closely followed that event. Two passages in Plutarch and one in the fourth book of the *Sibylline Oracles* evidently go back to a common heathen original. This must have arisen very shortly after the catastrophe, for it did not include the disasters of the year 80 nor the death of Titus in 81, else they would certainly have been mentioned by the Jewish author of the fourth book of the *Sibylline Oracles*, who ascribes the eruption of 79 to vengeance for the destruction of Jerusalem. (*Arch. Anz.* 1903, pp. 119-120.)

The Excavations in the Forum. — *Rec. Past*, II, 1903, pp. 227-242 (10 figs.), contains a summary of the recent excavations in the Forum, preceded by a brief account of the decline of the Forum and the excavations preceding 1898.

The Porticus Divorum and Serapeum in the Campus Martius. — In the *Röm. Mitth.* XVIII, 1903, pp. 17-57 (2 pls.; 4 figs.), C. HÜLSEN points out that the *Divorum* of the Notitia and Curiosum (Reg. IX) is the *Porticus Divorum* of Jerome and Eutropius, and refers to a great portico-like structure erected by Domitian to include two temples, one of Vespasian, the other of Titus. By reference to fragments of the Capitoline Plan — some new, others wrongly interpreted before — the building is reconstructed and its position assigned. It reached from the Piazza Grazioli southward to the Casa Professa dei Gesuiti. A similar study reconstructs the Serapeum, placing it between the Via Piè di Marmo and the Via S. Stefano del Cacco, just south of the Iseum. The Arco di Camigliano, that stood till the beginning of the seventeenth century at the eastern end of the Via Piè di Marmo, belonged to the complex of the Iseum-Serapeum. Incidentally it is pointed out that the well-known Pigna of the Vatican originally crowned the summit of the Pantheon of Agrippa; there it remained till the Pantheon was seriously injured by fire in the year 81 A.D.; some time thereafter (cer-

tainly before the time of Septimius Severus, and probably by Domitian, who restored both the Pantheon and the Serapeum) the injuries sustained in the fall from the dome of the Pantheon were repaired, and the cone was bored with numerous holes for waterpipes and made the central figure of a great ornamental *lavacrum* before the Serapeum, where it remained till shortly before the middle of the twelfth century, giving its name in the ninth and tenth centuries to a number of neighboring churches, and to a whole region of the city; probably shortly before the middle of the twelfth century the cone was transported to the entrance-court of the old St. Peter's, and placed under the tabernacle of the old Kantharos, which no longer served its original practical use; also the cone no longer dispensed water; from this place Paul V had it removed to its present place in the Vatican gardens. — From the study of other fragments of the Plan Huilen deduces the conclusion that the old Villa Publica was much reduced in dimensions by the new structures of Domitian, appearing as a triangular structure south of the Serapeum and west of the northern end of the Porticus Divorum. West of it lay the tomb of Agrippa built by himself (though he was actually interred in the Mausoleum of Augustus), and the original tomb of the Julian family, where the dictator Caesar and his daughter Julia were buried, together with Gaius and Lucius Caesar.

The Ancient Illustrations of Terence. — In *Jb. Arch. I.* XVIII, 1903, pp. 93-108 (7 figs.), E. BETHE, who has written the preface to the photographed edition of the Ambrosian illustrated manuscript of Terence, publishes some inferences drawn from his study of the illustrations in the various manuscripts and mediaeval editions of the plays, which in some instances belong to a different and more correct version than the traditional text. The explanation of certain passages where persons who are on the stage at the same time are not seen by each other, is suggested by the abbreviated representation of a door or doorway that occasionally occurs in the pictures. Probably these and numerous scenes in Roman and in new and old Greek comedy as far back as *The Acharnians*, which take place within a house, were presented in a sort of vestibule or *πρόθυρον*, which could be shut off from the view of the rest of the stage while visible to the audience. Often two houses were thus represented, but no definite idea of the arrangement has yet been obtained from terra-cottas or any other representations of the ancient stage. (See *Am. J. Arch.* VII, 1903, p. 480.)

Eneolithic Tombs near Viterbo. — In *B. Paletn. It.* 1903, pp. 150-186 (2 pl.; 27 figs.), G. A. COLINI describes the contents of eneolithic tombs recently opened near Viterbo. In a general discussion of the characteristics of the period, he arrives at the following results: the metal objects were made of copper or an alloy of tin; the eneolithic period is intermediate between the neolithic and the age of bronze not only chronologically, but in its archaeological material; the two principal groups of Italian antiquities of the eneolithic period have many characteristics and objects in common; the Italian civilization is a branch of that which flourished in other countries on the Mediterranean; the connection with the East became closer at the end of the period; relations existed during the period between Italy and central and western Europe. The stone hatchets of a votive character found in the tombs at Viterbo form a point of contact with the contemporary civilization of France and other parts of Europe.

SPAIN

The Iberians. — In *R. Ét. Anc.* V, 1903, pp. 383-384, C. JULLIAN states briefly his view of the Iberians. They are not a race, but the members of a state which was formed before the sixth century in the valley of the Ebro, and was named from the river. Of the dominant language, which may be called Iberian, a few words are preserved. After the sixth century this name and language forced their way into southern France, driving out the indigenous Ligurians, and ultimately reaching the Rhone.

Prehistoric Paintings near Santillana del Mar. — Since 1880 it has been known that in the cave of Altamira, near Santillana del Mar, there were paintings in red and black representing various animals. The prehistoric character of these paintings has hitherto been doubted. Recently E. CARTAILHAC and the Abbé H. BREUIL have visited the cave. In *C. R. Acad. Insc.* 1903, pp. 256-264, they report that there can be no doubt these paintings are of the same origin as those in many French caves. The oldest seem to be in black, and include linear signs as well as animals. Another series is scratched but not painted. A third series consists of twenty-five large animals in red. The art is in some ways more advanced than at Marsoulas or Font-de-Gaume, but they seem clearly to belong to the beginning of the age of the reindeer, and are works of *palaeolithic* art.

FRANCE

The Cantharus from Aliso. — In *Mon. Mem. Acad. Insc.* IX, 1903, pp. 179-188 (pl.; 2 figs.), A. HÉRON DE VILLEFOSSE publishes the silver cantharus found in 1862 in the excavations at Alise-Sainte-Reine. The article contains a full description of the vase and facsimile of the illegible inscriptions scratched on the base. The decoration is a very beautiful arrangement of myrtle branches with flowers and berries, tied by a ribbon. The general type is well known in the Augustan age, but this example is of special interest as it must be earlier than 52 B.C., the date of the siege of Alesia. It was found in a ditch of the besiegers, and it is probable that it was part of the booty of some Roman soldier. If so, it must have been brought into Gaul by Italian merchants.

Epona. — In *R. Arch.* II, 1903, pp. 348-350, S. REINACH publishes a new supplement to his "Epona" catalogue. He notes five new representations, and also discusses a statement of Dom Calmet on the subject. Ansonius says that *-ōna* in Celtic means *fons*, and if that is true, Ep-ona = *Ca-ballinus fons* = *ἱπποκρήνη*. Perhaps originally Epona was the goddess of the fountain conceived in the form of a horse. Later a woman was represented near or on the horse, and thus arose the goddess, protector of horses and of their increase.

The Gallic Candetum. — In *C. R. Acad. Insc.* 1903, pp. 329-330, is a note by D'ARBOIS DE JUBAINVILLE in which he determines the Gallic *candetum*. It was a square one side of which was 150 Roman feet, i.e. 100 Gallic cubits. The cubit was 0.444 m., hence the side of the *candetum* was 44.4 m. The Gallic *lenga* was one and one-half Roman miles, or 2220 m., that is 5000 Gallic cubits. Besides this rural *candetum*, there was one in use in the cities, having a side of 100 Roman feet. It is to be noted that *candetum* is derived from the Gallic *canton*, i.e. "hundred."

The Early Gallic Religion.—In his sixth article on the early Gallic religion (*R. Ét. Anc.* V, 1903, pp. 249–254. See *Am. J. Arch.* VII, 1903, p. 484), C. JULLIAN considers the domestic ritual performed at birth, betrothals, funerals, and the departure of a guest. Religious beliefs probably account for leaving doors open, hanging the heads of enemies in the dwellings, wearing *torques* not completely closed, and other similar customs. The judicial and political ritual and that of hunting are briefly considered.

The “Gourdeiziou” of Brittany.—It is well known that in German superstition the twelve nights from December 25 to January 6 are given to the wild huntsman, or Wotan, and that these correspond to the Brahminical twelve holy nights, which are the image of the new year. These twelve days are still known in Brittany, where they are called *gour-deiziou* or *gour-deziou*, or “supplementary days.” An old belief is recorded that these twelve days indicate the character of the twelve following months. These days seem to be an endeavor to equate the solar and lunar years, and must have been borrowed by the early Indo-Europeans from the Babylonians. Other examples of early Babylonian influence can be cited. (D’ARBOIS DE JUBAINVILLE, *C. R. Acad. Insc.* 1903, pp. 315–318.)

The Tiara of Saitaphernes.—In *R. Arch.* II, 1903, pp. 105–112, S. REINACH gives a summary history of this piece and the controversies it has called forth. (See *Am. J. Arch.* VII, 1903, p. 486.) The complete authenticity of the work can no longer be maintained, but the question is still open whether the tiara is a restoration and interpolated copy of a lost original, or whether it is the product of a skilful forger working on the débris of a previous fraud. The first hypothesis seems more probable, but nothing is sure.

BULGARIA

The Tropaeum of Adamklissi.—In *Röm. Mitth.* XVIII, 1903, pp. 68–72, E. PETERSEN combats vigorously Furtwängler’s idea that this monument was erected in commemoration, not of Trajan’s campaign, but of that of M. Licinius Crassus in 29–28 B.C., arguing not merely that there is no reason to doubt the testimony of the inscription to its later origin, but also that the reliefs show no trace of the characteristics of the campaign of Crassus as recorded by Dio.

Additional discussion of this monument is found in *Jh. Oesterr. Arch.* I, VI, 1903, pp. 247–266 (7 figs.). G. NIEMANN reports briefly the architectural results of Furtwängler’s recent study, accepting the chief points in the proposed restoration of the hexagonal basis of the *tropaeum* proper, but dissenting sharply from the proposed analogies in Augustan works. O. BENNDORF restates fully the grounds for assigning the Tropaeum to Trajan, and combats in detail the arguments by which Furtwängler, in spite of his recognition of the inscription as placed by Trajan on the building, still supports his theory that it was erected by Licinius Crassus in 29–28 B.C.

GERMANY

Terra-cotta Makers in Cologne.—Following upon an article by J. KLEIN in the *Jb. V. Alt. Rh.* 79, pp. 178 ff., on the two makers of terra-cottas at Cologne, Servandus and Vindex, which fixed their period in the second half of the third century after Christ, H. LEHMER, *ibid.* 110, 1903, pp. 188–

202 (2 figs.), shows that a terra-cotta of Servandus is dated in the year 164 A.D., and that considerations of style show that Vindex lived earlier by at least half a century.

ENGLAND

Exhibition of Ancient Greek Art in London, 1903. — The exhibition at the Burlington Fine Arts Club last June and July, taken almost entirely from private ownership in Great Britain, was a revelation of the richness of this field, although many of the pieces had previously been published. The chief treasure was a fragment from the procession of riders in the Parthenon frieze. Other notable marbles were a splendid fragment of an Attic grave-relief with inscription (Lansdowne collection), the grave-stele of Timarete, the powerful female head which appears on the title-page of Jahn's *Electra*, and the Petworth head that has been discussed by Furtwängler. Among less well-known sculptures were a number of female heads; one of poros-stone, from Sicyon, with curious slanting eyes; another, almost archaic, formerly in the Borghese collection; two replicas of a type that has been published by Köpp, and a Hellenistic head from Chios, of singular beauty; also a remarkably lifelike portrait head of a beardless man (Menander?); a statuette of Heracles, evidently taken from a well-designed original of good period; and the gravestone of Archippus, a well-preserved specimen of the late Hellenistic art of Asia Minor. Among the bronzes, a fifth-century head of Apollo, belonging to the Duke of Devonshire, contrasts with an Eros from Boscotrecase, in much more modern style. A life-size Roman portrait head of a boy is worthy of any museum. The small bronzes, too, were all pieces of high value and individuality. There were a few pieces of silver, notably a two-handled cup of fine Hellenistic work, and a gilded Maenad head, an emblem from a plate. The terra-cottas, numbering one hundred, included pieces of distinction. Among the eighty-eight vases were the Marquis of Northampton's vases with masters' signatures, published by Klein, and twelve white-ground polychrome Attic lecythi, which have been in the possession of Lord Elgin's family since his acquisition of them. There was a collection of coins and gems, one hundred and fifty of the gems being lent by Mr. Arthur Evans. The catalogue, prepared by some of the best archaeologists in England, is a valuable possession, especially in the illustrated edition. (A. CONZE, *Arch. Anz.* 1903, pp. 143-145. See *Am. J. Arch.* VII, 1903, p. 390.)

The Roman Wall in Northern England. — In *Jb. V. Alt. Rh.* 110, 1903, pp. 1-38 (3 pls.; 6 figs.), E. KRÜGER gives a careful discussion of the history, course, and character of the Wall, departing in a number of points from the conclusions earlier reached by Bruce, Huebner, Haverfield, and others, and showing that much can only be decided by further excavation and study.

CHRISTIAN ART

GENERAL AND MISCELLANEOUS

The Lamb-symbol. — In the *Rev. Art. Chrét.* XIV, 1903, pp. 212-222, there is a short account of the lamb-symbol in Christian literature and art by X. BARBIER DE MONTAULT. A small bibliography is included.

The Christian Monogram in Mas'oudî. — The Arabian historian Mas'oudî says that St. Helena placed her name, with the cross, on all the churches

she built. He goes on to show that the numerical value of ἑλένι (as he spells it) is 100. In *C. R. Acad. Insc.* 1903, pp. 416-419, CLERMONT-GANNEAU shows that the Christian monogram, ☩ or ☐, has been separated into +, the cross, and P = 100; hence interpreted as the symbol of Helena.

The Papyrus Letter from the Great Oasis.—FRANCHI DE' CAVALIERI, *N. Bull. Arch. Crist.* 1902, pp. 15-25 (facsimiles), gives a convenient description and critique of the papyrus letter (713 Brit. Mus.) found at Dûsch-el-Kala in the Great Oasis, and published with a commentary by Deissmann (Tübingen and Leipzig, 1902). Psenosiris, πρεσβύτερος resident in the interior (ἐνθάδε εἰς τὸ ἔσω) of the oasis, writes to Apollo or Apollonius, probably at Kysis (Dûsch-el-Kala), that the woman who had been sent by the authorities into the oasis in charge of the grave-diggers (νεκροτάφοι, perhaps a party carrying a mummy for burial) had been given over into the custody of those of the νεκροτάφοι who were "good men and true" (καλοῖς καὶ πιστοῖς), πιστοῖς seeming to be used in the Christian sense of believer (cf. Sicilian inscriptions), and then veiled by joining it to καλοῖς. This, and the ambiguous tone of the letter, makes it possible that it was written during one of the persecutions, and that the woman concerned was a believer exiled to the oasis.

Christian Inscriptions of North Africa.—In *R. Arch.* II, 1903, pp. 59-90 (26 figs.), P. MONCEAUX begins the publication of a provisional collection of the Christian inscriptions of North Africa. In the introduction (pp. 59-64) the limits and plan of the work are described. Until the end of the fourth century only those inscriptions are included which contain distinct evidence of their Christian origin. After the beginning of the fifth century, all inscriptions may be regarded as Christian unless shown by their contents to be pagan. The inscriptions will be classified by subjects, and treated in the following order: Greek, Jewish, Metrical, those relating to martyrs or their relics, dedications and *ex-votos*, biblical quotations, laudatory and other monumental inscriptions, those on various objects, such as vases, lamps, seals, weights, etc. Epitaphs will not be included, except for Greeks, Jews, and the epitaphs for bishops and the clergy; but there will be a study of the geographical distribution of the formulae, and of their chronology as determined by dated inscriptions. Under each group the order will be geographical, as in the *Corpus*, but with the Carthaginian inscriptions first. The rest of the article is devoted to *Greek Inscriptions*. It discusses briefly their geographical distribution (more than half are from Carthage), date (almost all Byzantine), material, contents, decoration, and formulae. Then follow seventy-four very short texts, with facsimiles of seals, weights, amulets, and the more important documents. *Id. ibid.* pp. 240-256 (13 figs.), continues this publication with Nos. 75-119.

The Catacomb of Albano.—The Christian cemetery of Albano was discovered in 1720, and first described by Boldetti. The only good account of it since was that by De Rossi in the *B. Arch. Crist.* 1869. MARUCCHI, in *N. Bull. Arch. Crist.* 1902, pp. 89-111, gives a résumé of the results of De Rossi's examination of the passages in the martyrologies and itineraries relating to the catacomb, a catalogue of the inscriptions and brickstamps, and in pl. i-v, a plan of the catacomb, sections of the "cripta storica," and reproductions of three of the frescoes. The catacomb and its paintings, some of them not before published, are described, and a short summary

given of the history of the cathedral and bishops of Albano, including the Ursinus *Episcop(us) Albanens(is)* mentioned in an epitaph found in the catacomb of Domitella, at Rome. (*N. Bull. Arch. Crist.* 1899, p. 26.)

The Undisguised Cross in the Catacombs.—A short but extremely important article is that of WILPERT in *N. Bull. Arch. Crist.* 1902, pp. 1-14 (2 pl.; 10 figs.). Heretofore, the undisguised cross of "Latin" or "Greek" form was supposed to be practically unused before the fifth century. Wilpert enumerates and describes no less than eight examples from the catacombs which all date from the first four centuries. The article contains also some interesting observations, adducing new material on the symbolism of the anchor and the T.

"Where Peter Baptized."—In pp. 71-111 of *N. Bull. Arch. Crist.* 1901 (see *Am. J. Arch.* 1902, p. 93), MARUCCHI described the baptistery or water-tank discovered in the northern part of the catacomb of Priscilla, and showed that this monument, viewed in the light of a proper reading of the mediaeval sources for the topography of the region between the Via Salaria Nova and the Via Nomentana, made it likely that the appellations *ad fontes*, *ad nymphas S. Petri*, *ubi Petrus baptizabat*, and lastly the name *Ostrianum*, belong more properly to the catacomb of Priscilla, or to a part of it, than to the catacomb adjoining S. Agnese on the north, or the Via Nomentana, to which these names have heretofore been assigned. In subsequent articles, *Ibid.* 1901, pp. 277-290; 1902, pp. 113-122, and 217-232, Marucchi elaborates this theory and supports it by an analysis of the acts of martyrs, inscription catalogues, itineraries, and other mediaeval sources bearing on the question. In the plan made by De Rossi of the basilica of S. Silvestro, the remains of which, above the catacomb of Priscilla, were discovered in 1889, a baptistery is indicated, which was probably connected with the tank which Marucchi discovered under ground. Still another tank has lately been found, directly under the apse of the basilica. From these tanks and the font doubtless arose the designations *ad fontes* and *ad nymphas*, applied to the place "where Peter baptized." It was in the font, probably, that the inscription was placed which appears in the Sylloge of Verdun, labelled "*ad fontes*," and which speaks of baptism, the *sedes apostolica*, and St. Peter. The Acts of Pope Liberius, the only document which gives the name *Ostrianum* to the place "where Peter baptized," indicates it near the cemetery of Novella, a catacomb at the third mile of the Via Salaria Nova, and therefore nearer to Priscilla than to the so-called *Ostrianum* of the Via Nomentana. The principal objection to Marucchi's theory lies in the Acts of SS. Papias and Maurus, inserted in the Acts of Pope Marcellus, according to which both martyrs were buried, "*in via Numentana sub die quarto Calendarum Februarium ad nymphas beati Petri ubi baptizabat*." The acts usually end with the date of burial, so that the last phrase, *ad nymphas*, etc., may be a marginal interpolation. In that case it might be a note to indicate a burial place for Maurus which was different from that of Papias. This is borne out by the fact that according to the itineraries only Papias was buried on the Via Nomentana, while a Maurus, buried in Priscilla, is mentioned by the *Libri de locis SS. martyrum*. *Ad nymphas* would then mean the cemetery of Priscilla. Or the note may have referred to that part of the text in which Marcellus is said to have baptized the martyrs, and have been meant to designate the place *ubi* (*Marcellus*)

baptizabat. In *ibid.* 1903, pp. 199-273, Marucchi writes a final article on the subject, suggested by BONAVENIA, *ibid.* pp. 135-146. Bonavenia, having discovered connecting stairways between the first and second stories of the catacomb of Priscilla, and regarding the lower story as the much-desired cemetery of Novella, argues strangely that the two cemeteries being united went under the general name of *Coemeterium Priscillae ad S. Silvestrum*, and that, therefore, Marucchi's Ostrianum cannot be a part of Priscilla. Marucchi accepts Bonavenia's identification of the lower story of Priscilla with the cemetery of Novella, and points out that if the cemetery of Novella is a part of Priscilla, there is no reason why another part, the unexplored region of the lower story on the north, or that portion of the upper story around the water-tank first discovered, may not have had the local name of Ostrianum. These two identifications explain the passage in the Acts of Liberius, which describes the Ostrianum as near the cemetery of Novella. In the last article, Marucchi sums up the arguments for his theory, among which undoubtedly the strongest is that suggested by Du Chesne, namely, that after the confiscation of the cemetery of Calisto by Diocletian, the popes were buried for some time in Priscilla, indicating a veneration attached to the latter catacomb which might well have been paid to the place "where Peter baptized." A new plan of the catacomb accompanies Marucchi's last article.

The Sarcophagus from Sta. Maria Antiqua.—The Christian sarcophagus from Sta. Maria Antiqua, near the Forum (see *Am. J. Arch.* VI, 1902, p. 94; VIII, 1904, p. 79) is published by S. REINACH in *R. Arch.* II, 1903, pp. 125-126 (fig.), with a very brief commentary, and a good reproduction. To the three examples cited by Marucchi of the child Jesus baptized by an old St. John, are added three more, without counting ivories and a mosaic. Evidently the belief that only six months separated the births of St. John and Christ was not the only one during the fourth century.

BYZANTINE AND MEDIAEVAL ART GENERAL AND MISCELLANEOUS

Mediaeval Purses.—In *Reliq.* IX, 1903, pp. 217-229 (8 figs.), W. HENEGAGE LEGGE describes mediaeval purse frames of brass or metal, on which were stretched the pouches of silk or leather, often richly embroidered. They consist of a top bar with a ring for suspension from a girdle or finger, while the larger ones have one or two semicircular hoops to which a border of the covering was attached. Some examples have a sub-bar moving on a central pivot. The framework frequently bears decorations or lettering. Several examples are described, including a fine specimen found in the early part of the nineteenth century in Binham Priory, Norfolk. The article contains also some account of the building and history of the Priory.

Allegorical Tapestries.—*Mon. Mém. Acad. Insc.* IX, 1903, pp. 95-121 (3 pl.; 4 figs.), contains an article by the late EUGÈNE MÜNTZ on allegorical tapestries. While reserving the large series based on the Romance of the Rose and the Triumph of Petrarch for another article, the author discusses a number of tapestries representing the conflict of the Virtues and Vices, for the most part in a deeply religious spirit, another group in which the Virtues and Vices are presented in the style of a morality, and

finally a curious tapestry representing the Triumph of Poverty, which recalls Holbein's painting, though the spirit is widely different. A plate, prepared at the request of M. Müntz, reproduces another allegorical tapestry, but the discussion had not been written at the time of the author's death.

The 'Vision of Ezechiel' on an Ivory of the British Museum.—The British Museum possesses a Byzantine ivory plaque of the ninth century, the gift of F. Slade (1856), on which two scenes are carved, one of them representing Christ in the midst of angels, the other, undoubtedly complementary to the former, picturing the 'Vision of Ezechiel,' according to E. von Dobschütz. Ezechiel stands upright, his halo differing from Christ's in having no cross, and stretches his right hand over three naked forms which rise out of an enclosure. The background displays a city, over which one reads the inscription, "Then Christ resurrected the bones through the prophet," the ligature of $\pi\rho$ being expanded by Von Dobschütz to $\pi\rho\phi\eta\tau\omicron\nu$. (*Rep. f. K.* 1903, XXVI, pp. 382-388.) If this interpretation is accepted, the juxtaposition of Christ and Ezechiel on the relief leads us to suppose that the bearded figure which accompanies Ezechiel on Christian sarcophagi is also Christ, considered as the preëxistent Logos, and helps to determine other figures of the Logos in Christian art. The conception of the scene on the plaque is very different from that in the 'Ezechiel's Vision' figured in a manuscript of Gregory Nazianzen at Paris, also of the ninth century.

Byzantine Steatite Reliefs.—Among the most interesting examples of Byzantine art of the best period, — the tenth, eleventh, and early twelfth centuries, — is a series of small steatite reliefs, which are found, usually in fragments, among the ruins of most of the Eastern churches. In *Mon. Mém. Acad. Insc.* IX, 1903, pp. 229-236 (pl.; fig.), G. SCHLUMBERGER gives a partial list of these reliefs, and describes in detail two remarkable specimens belonging to the Comtesse de Béarn. One (16 cm. $\times$ 11 cm.) shows in the upper part, between the archangels Michael and Gabriel, the 'Preparation,' or throne on which are displayed the double-barred cross, the lance, and sponge fixed to a reed. Below are four saints, — Demetrius, Theodore the Stratilate, George, and Procopius. Between the two fields is an inscription in praise of the $\sigma\tau\rho\alpha\tau\eta\lambda\acute{\alpha}\tau\alpha\iota$. The other relief is smaller, and shows only St. Demetrius.

ITALY

The Barbarian Necropolis of Castel Trosino.—More than two hundred graves of a cemetery near Ascoli Piceno, with their situation and contents, are described and illustrated by R. MENRELLI in *Mon. Ant.* XII, 1903, coll. 145-342 (14 pls.; 244 cuts). With the exception of four archaic graves, they are all of a barbaric epoch and a Germanic people, probably the Langobardi, who were settled in this region from 578 A.D. until they were driven out by Charlemagne in 773 A.D. There are two distinct periods within this time, — the first Arian and pagan, the second, after about 620, Catholic. To the latter belonged the church from which the site has its name of San Stefano. The older cemetery, of which only four graves have been found, has probably been carried away by landslides.

The Atrium of S. Ambrogio in Milan.—D. SANT' AMBROGIO in *Arte e Storia*, August, 1903, pp. 93-95, argues that the blind or wall arcades in the enclosing wall of the atrium of S. Ambrogio in Milan are testimony

against the early date—ninth century—to which the atrium is assigned by most. A similar arcade, with about the same measurements, supports the right side of S. Maria di Calvenzano, near Melegnano. This church depended, like the Benedictine chapter in S. Ambrogio, on the Cluny monastery, and dates from the twelfth century. The writer does not think that the blind arcade in S. Maria di Calvenzano is an imitation of S. Ambrogio as an older and venerated type, — because in that case certain secondary characteristics of the atrium would have been reproduced in the later church, — but that the arcades are a common characteristic of constructions by the Benedictines of Cluny, being found in other Cluniac churches, and that the atrium of S. Ambrogio is only a little earlier than S. Maria di Calvenzano, is derived from Cluny, like the church to which it is attached, and dates from the twelfth century.

The Origin of Niccola Pisano and of his Art. — These two questions, after being decided in favor of South Italy, and particularly of Apulia, by Crowe, Venturi, and later, Schubring, and Bestaux, are discussed anew by ERNST POLACZEK in *Rep. f. K.* XXVI, 1903, pp. 361-371. The indication "*de Apulia*," in the Sienese document cited by those who claim Niccola for South Italy, may certainly refer to the sculptor's father, and Polaczek shows that this must be the case by reason of the inscription on the fountain at Perugia, of which he has made a fresh collation. The reading *natu Pisani* (instead of the incorrect *natus Pisani*), referring to Giovanni and Niccola, who made the decorations of the fountain, shows clearly that Niccola was of Pisan birth. The arguments for deriving Niccola's style from that of the South Italian masters are combated by Polaczek, who argues that his work is rather to be regarded as cognate with theirs in so far as it reflects the infusion of the classic into Gothic sculpture, and that, on the whole, it shows more the effect of his Tuscan and North Italian contemporaries and predecessors than of the South Italians.

FRANCE

The Date of the Bayeux Tapestry. — This question, raised by a recent monograph by A. Marignan, is discussed in an article by LANORE, *Bibl. Éc. Chartes*, 1903, pp. 83-93. Marignan dates the tapestry after 1170, on the ground that the composition was inspired by the *Roman de Rou* of Wace, written about that date, and that the costumes and customs figured on the curtain are all of the latter half of the twelfth century. Lanore shows that many scenes and personages of the tapestry are not contained in Wace, or in other writers earlier or later. This fact and the excess of detail in the pictures, on the one hand, and the meagreness of the explanatory inscriptions, on the other, indicates that it was composed for a generation well acquainted with the story of the conquest of England, although the error of substituting Bayeux for Bonneville, as the place where Harold took his famous oath to William, shows that this generation must have been somewhat later than the Conquest itself. This substitution of Bayeux for Bonneville, and the prominence of Bayeux personages in the tapestry, leads to the conclusion that it was made for a church in that town, and probably for the cathedral. The customs and apparel are consistent with the last quarter of the eleventh century or the first of the twelfth. Lanore concludes by assigning the work to the period between 1080 and 1095. He makes some interesting identifications of characters in the tapestry. P. MAYENS also

reviews Marignan's book in *R. Art Chrét.* XIV, 1903, pp. 239-241, and concludes, like Lanore, that the costumes in the tapestry indicate a time much earlier than Wace.

GERMANY

'Church' and 'Synagogue' on the Cathedral at Strassburg. — These two statues, which stand on the right and left of the south portal of the cathedral at Strassburg, form the basis of a monograph by Dr. KARL FRANCK-OBERASPACH (*Der Meister der Ecclesia und Synagoge aus Strassburger Münster*. Düsseldorf, 1903, Schwann). The two figures, which are of the most exquisite of Gothic sculpture, represent, the one the triumphant 'Church,' crowned, holding chalice and cross in her hands, the other the 'Synagogue,' blindfolded, defeated, and drooping. The author traces the inspiration and technique of these figures, hitherto claimed for German art, to the school which conceived the decorations of the cathedrals at Laon and Chartres. Traces of its influence may be seen elsewhere in France, as at Reims, but it was at Strassburg and in these two figures that the school reached its best. Their maker left, however, no school in Strassburg.

ENGLAND

Bishopston Church. — In *Reliq.* IX, 1903, pp. 173-185 (13 figs.), W. HENEGAGE LEGGE describes the early church at Bishopston, Sussex. The porch, with its vertical sun-dial, is Saxon, but the portal is early Norman, and the rest of the structure is Norman or early English.

A Viking Brooch. — In *Reliq.* IX, 1903, pp. 203-204 (pl.), J. ROMILLY ALLEN publishes a silver penannular brooch found, with a twisted silver torque, in 1847, at Orton Scar, Westmoreland. The stamped pattern at the head of the pin, and the torque, prove it to belong to the Viking period, and its decoration shows a characteristic mingling of Eastern, Scandinavian, and Celtic styles.

Pre-Norman Remains. — In *Reliq.* IX, 1903, pp. 257-266 (9 figs.), W. G. COLLINGWOOD discusses in detail the pre-Norman carvings at Lancaster. (See *Am. J. Arch.* VII, 1903, p. 256.) They range from the earliest type of fine old Anglian work to late sculpture of the Danish period in the tenth and eleventh centuries. They are, for the most part, fragments of Anglian or Danish crosses, with scroll and leaf patterns, but one bears an inscription, and three others have rude human or animal figures. *Id. ibid.* pp. 204-205 (fig.) describes another Anglian cross-fragment, of the eighth or ninth century, at Kendal.

Norman Fonts. — In *Reliq.* IX, 1903, pp. 273-274 (fig.), G. LE BLANC SMITH describes an early font at Thorpe-Arnold, which has on the west face a relief representing a figure with a halo, and a cross on his shield, in combat with five dragons. It is argued that this must be Transitional Norman and not Early English. *Ibid.* pp. 206-208 (3 figs.) contains an account of a Transitional Norman font at Belton, Lincolnshire. It is octagonal, and the eight faces are sculptured with figures under round arches.

St. Mary's Reculver. — In continuation of J. RUSSELL LARKBY's article (see *Am. J. Arch.* VII, 1903, p. 493) on the early Norman church of St. Mary at Reculver, F. GRAYLING publishes in *Reliq.* IX, 1903, pp. 253-256 (3 figs.), some notes on the original state of the church, which was destroyed in 1809, after several years of agitation on the part of the vicar. What remains was preserved by the interference of the elder brethren of Trinity House.

RENAISSANCE ART

ITALY

Portraits of Jacopo dei Barbari and Luca Pacioli.—VENTURI publishes in *L'Arte*, 1903, pp. 95, 96 (pl.), a remarkable portrait of Jacopo dei Barbari, who taught Dürer his proportions, and Luca Pacioli, the monk, who diffused the precepts of Pietro dei Franceschi and was the author of the book, *De Divina Proportione*. The two men stand behind a table, on which are various mathematical instruments, a Euclid opened at the 23d book, Luca's own book marked on the edge, *Li(ber) R(egulaeum) Luc(ae) Bur(gensis)* (i.e. of Borgo San Sepolcro), and finally a slip of paper marked with the date of the picture: *Ioco(bus). Bar(barus). Vigen | is. P(inxit). 1495*. The picture came originally from Bitonto and passed into the hands of Fairfax Murray of London, from whom it came to the Italian government.

New Portraits of Dante.—In the *Rass. d'Arte*, 1903, p. 145, is a *résumé* of an article written for the *Giornale Arcadico* by AGOSTINO BARTOLINI to the effect that in one of the eight frescoes by Oderici (14th cent.), decorating the vault of the church of the Incoronata at Naples, are two figures which represent Dante and Thomas Aquinas. The portrait of Dante, however, would be rather a "reminiscenza dantesca" than a real likeness. According to Mlle. DE JONGH, there is another portrait of the poet in the 'Deluge' of Paolo Uccello at S. Maria Novella, in Florence. (*Chron. d. Arts*, 22 August, 1903, p. 234. *Gaz. d. B. A.* XXX, 1903, pp. 310-318.)

The 'Fontana delle Tartarughe.'—The 'fountain of the tortoises' in Piazza Mattei, Rome, one of the most pleasing of the popular "sights" of the city, has recently been cleaned of the incrustation which disfigured it, and thoroughly renovated, to the great joy of the Romans, who have always held it in special affection. G. BEDESCHI, in *L'Arte*, 1903, pp. 220-222, gives a brief account of the monument, which is the work of Taddeo Landini, a Florentine and a pupil of Giambologna, though it has been assigned to Raphael and to Giacomo della Porta. A sketch for the fountain, attributed by Neri to Carlo Maderna, is to be found in the Uffizi.

A Holy Family by Granacci.—The National Gallery of Ireland contains a Holy Family ascribed to Mainardi. The composition shows strongly the influence of Michelangelo, Raphael, and Leonardo, and this is enough to discredit the attribution to Mainardi, who was a slavish follower of Ghirlandaio. Among the lesser Florentine artists of the Cinquecento only three can be considered as possible, Franciabigio, Bugiardini, and Francesco Granacci. A comparison of the works of these artists leads to the conclusion that the picture was painted by Granacci. (MARY LOGAN, *R. Arch.* II, 1903, pp. 21-24; pl.)

The 'Madonna delle Rocce.'—Conte N. B. Pisani, in *Arte e Storia*, 1903, pp. 13-14, and 21-25, reviews the evidence in the question of the three pictures known as the Virgin 'delle Rocce' and ascribed to Leonardo da Vinci. Of these, one is in the Louvre, one in the National Gallery in London, and the third was "discovered," in 1900, by Sant' Ambrogio, in the parish church of Affori, a little village near Milan. Pisani concludes from the letter written by Leonardo and Ambrogio de Preda to Ludovico il Moro that the contract undertaken by the two to furnish an altar piece for a chapel in S. Francesco, in Milan, was never fulfilled,

so far as Leonardo was concerned. His part of the work, the Madonna herself, was withheld, and later probably passed into the possession of Francis I, from whose collection tradition has it that it came to the Louvre. The London Madonna is traceable to the same church of S. Francesco, having been bought from that church as the original Leonardo by Gavin Hamilton, about 1796, and in time sold to the National Gallery. This Madonna was doubtless the one substituted for Leonardo's by Ambrogio de Preda, who made the angels which flanked it originally and which afterward followed his Madonna to the National Gallery. The arguments of Sant' Ambrogio for the Affori Madonna are combated by Pisani, who considers it, like the London picture, the work of some pupil of Leonardo or of a painter of the Milanese school.

Two New Pictures by Filippo and Filippino Lippi. — These are published by ARDUNIO COLASANTI in *L'Arte*, 1903, pp. 299-304. The first is in the possession of Mr. Harnisch of Philadelphia, who acquired it from Countess Baglioni. Before it passed into the Baglioni family, in the latter part of the eighteenth century, it stood in the church of Castelfianco di Sopra, near Florence. It represents the Virgin and Child, with angels. Colasanti regards it as somewhat earlier than the similar picture by Filippo in the Uffizi. The Filippino is a Madonna adoring the Child, which will soon be placed in one of the Florence galleries. It seems to be the composition for which a drawing by Filippino (Virgin's head), in the Galleria delle Stampe at Rome, was a study. Colasanti assigns it to 1479 or 1480.

The Date of the Death of Luini. — At Lugano Emilio Maggetti has found among the acts of a notary, preserved in the city library, a document dated July, 1532, which speaks of money paid to Evangelista, "*filio quondam magistris Bernardini de Luyno olim pictoris*." This conflicts with two other pieces of evidence for the date of Luini's death, namely, the record in a conventual book cited by Sacchi, *Icnografia Italiana degli nomini e delle donne celebri*, in which record is made of fifty lire paid to *Luyno* in 1533, and a note in the manuscript of Calvi, who had projected a biography of the painter, to the effect that, according to a manuscript of the church of the Madonna at Saronno, Luini painted the cloister of that church in 1547. (PIERRE GAUTHIEZ, *Gaz. B. A.* XXX, 1903, pp. 189-192.)

A Canvas attributed to Giorgione. — A picture which is the property of Sig. Drog in Venice and represents St. Jerome in a moonlit desert, is attributed by ANTONIO DELLA REVERE to Giorgione (*Rass. d'Arte*, 1903, pp. 90-94). The attribution is supported by points of similarity in other works of the master, but rests chiefly upon the resemblance of the figure of St. Jerome to that of the Jew in the 'Christ bearing the Cross,' in S. Rocco, Venice. The latter has been supposed a Titian, but was reclaimed for Giorgione by della Revere in an article in *Arte e Storia*. Further evidence is afforded by comparing St. Jerome with the 'Three Ages of Man,' in the Pitti. A copy of such a picture by Giorgione is mentioned in the catalogues of Michiel, and the words "Giorgione fecit" are said to have been on the canvas originally, whatever value this may have.

Perugino's Coöperation in the Certosa di Pavia. — VALERI in the *Rep. f. K.* XXVI, 1903, pp. 372-381, publishes some interesting letters of Ludovico il Moro and others, which throw light on Perugino's engagement by the monks of the Certosa, showing that the patrons of the fifteenth

century were not always "good pay," and that Perugino was of a procrastinating nature, as indeed we learn from other sources.

The Disappointed Suitor in the 'Sposalizio' of Raphael. — ERNST VON MÖLLER writes in the *Rep. f. K.* XXVI, 1903, pp. 288-295, of the suitor who breaks his staff in the 'Sposalizio' of Raphael and similar pictures. The motive is not derived from a custom, nor is it an incident of the legend as it is handed down by the apocryphal Gospels. According to von Möller, Giotto is responsible for the introduction of the element into the 'Sposalizio.' Accompanying the article is a list of paintings which contain the incident.

Raphael's Drawings. — FRANZ WICKHOFF contributed to the April sitting of the Philosophisch-historische Klasse of the Imperial Academy of Vienna (*Jahrg.* 1903, pp. 45-60) a preliminary statement of the results of his work on the drawings of Raphael. There are over a thousand ascribed to him. Out of these, eliminating first the copies and forgeries, second the drawings of his co-workers and imitators, lastly those of his pupils, we have a residuum of about one hundred and fifty which may be called his. These present a satisfactory basis for tracing the development of Raphael's art. Thus in the first part of his Roman period we find him still adhering to Florentine naturalism save in his free treatment of drapery. He draws his figures singly from models, and avoids flying movement. Later, the presence of pupils is manifested in his new manner of overlapping the figures in the cartoon, to give his pupils the proper proportions of the picture. He still draws from models. It is only in his last Roman period that one begins to see movement too violent to have been reproduced from models, and groups much more involved. Thus released from the naturalism of the Florentine quattrocento, dependent no longer on models, his conceptions widen at once. Here, too, we find in his drawings the traces of inspiration from the antique.

A Chimney Piece with the Story of Croesus. — In *Atene e Roma*, IX, 1903, coll. 282-291 (3 figs.), G. POGGI discusses a chimney piece from the Palazzo Borgherini in the National Museum at Florence. It is the work of Benedetto da Rovezzano, and represents the story of Croesus. On the left, Croesus' son prays Apollo to save his father; in the centre, Croesus and the Lydians in the flames, which are extinguished by the rain; at the right, Cyrus on his throne directs the liberation of Croesus. The version followed differs from that of Herodotus, and resembles that of Nicolaus of Damascus, but it is hard to see how Borgherini could have known this story, as the fragments of Nicolaus were not published till 1634.

Titian's 'Sacred and Profane Love.' — The discussion of the meaning of this picture (see *Am. J. Arch.* VII, 1903, p. 498) is continued in the *Nation*, November 26, 1903, by W. P. ANDREWS in a brief but sharp criticism of Palmari's interpretation, and *ibid.*, December 17, 1903, by Miss A. M. KEYES, who argues that it is an illustration of the *Pervigilium Veneris*. (See *Am. J. Arch.* VIII, 1904, p. 74.)

The First Italian Block-book. — In the collection of engravings in the Berlin Museum may be found a series of eighteen woodcuts of the Passion, which would appear to have been executed in Venice about the year 1450. They are studied by Dr. PAUL KRISTELLER in *Jb. Preuss. Kunsts.* 1901, and more recently by Prince d'ESSLING in a monograph, *Le premier livre xylographique italien imprimé à Venise vers 1450*, Paris, 1903. An abstract of this

volume forms two articles in *Gaz. B. A.* XXX, 1903, pp. 89-96, 243-255. Prince d'Essling shows that the designs of these engravings are based on sculptural rather than pictorial prototypes, that various details of architecture and of costume point to Italy and especially to Venice as the source from which this block-book came.

In this connection it is interesting to note an article in *L'Arte*, 1903, pp. 265-270, by LIONELLO VENTURI, who cites a number of examples to show that woodcuts were not a German importation into Italy, but existed there in the first part of the quattrocento and earlier. Woodcuts were used to stamp cloth in Burgundy in the fourteenth century, as Bouchot has proved, publishing a matrix from the territory of Saône-et-Loire, a conclusion which is supported in some degree by another matrix in the San Giorgi gallery in Rome, from the Baud collection, Lausanne, published by Venturi in his article. As in France, so in Italy, the art of wood-engraving arose independently of Germany. A decree of the Venetian senate, of 1441, which speaks of "figure stampate," and an Italian stamped fabric of about 1350, preserved in the Museum of Berne, are already known. New evidence is afforded by the 'Madonna del Fuoco,' at Forlì, which shows according to Venturi that wood-engraving was practised in Italy from the fourteenth century. This engraving was nailed to a wall in a school at Forlì, which burned in 1428. The cut and the wall to which it was attached having been miraculously preserved, the former was preserved as a relic. Venturi gives a reproduction of the picture, with a description and critique.

FRANCE

A Cartoon by Moreau the Younger.—An interesting political cartoon, which has never been published, is the drawing by Moreau the Younger intended for an engraved memorial of the accession of Louis XVI and Marie Antoinette. It reflects the joy of gratified hate with which the people greeted Louis' first act, the dismissal of his father's ministers, Chancellor Maupeou and the Abbé Terray. Louis and Marie Antoinette are seated on a throne; behind them is a figure of Truth, unveiled by Time; to the right, Minerva; at the foot of the throne, France. The lightning from Minerva's aegis confounds the disgraced ministers, who flee in consternation on the right of the picture, accompanied by their satellites and drawn to their ruin by Falsehood and Discord. From the right a group of men advances, representing the Return of the Parlément. Above them leans Abundance. To the left of the royal couple are the four princes of France, and in the lower left-hand corner a crowd of applauding citizens, to whom Marie Antoinette extends her right hand graciously. The ultra-political character of the design probably accounts for its never having been printed, its place being taken by the author's two medallions, 'Au Roi,' and 'A la Reine,' engraved by Le Mire, in which some souvenirs of the cartoon may be seen. (PIERRE DE NOLHAC, *Gaz. B. A.* XXX, 1903, pp. 467-473.)

French Tapestries.—J. GUIFREY, in *Chron. d. Arts*, 1903, September 19, pp. 252-254; October 3, pp. 260-261; October 17, pp. 268-270, gives an interesting series of notes on some French tapestries, dating from the sixteenth century on, that are almost or quite unknown.

The Statue of Voltaire by Pigalle.—Comte D'HAUSSONVILLE, in *Gaz. B. A.* XXX, 1903, pp. 353-370, writes a charming account of Pigalle's statue

of Voltaire. He traces the history of this peculiar work from the meeting of the "Église Philosophique" at Mme. Neckar's, where the idea of a monument to Voltaire originated, to the quasi-oblivion in a corner of the Library of the Institute which has been its final fate. This fate is attributed by the writer not so much to the defects or strangeness of the statue as to the decadence of Voltaire-worship. Lady DILKE writes to the *Chron. d. Arts*, November 7, 1903, p. 283, that the cause of the relegation of the statue is to be found in the condemnation of Voltaire by the *Parlément* in 1770, which ordered several of his works to be burned. His unpopularity in high quarters rendered it unsafe to expose the monument publicly. Lady Dilke finds this information in the *Correspondance Littéraire de Grimm et Diderot*, cited by her in *French Sculptors of the Eighteenth Century*, p. 93.

BELGIUM AND HOLLAND

The Brothers Van Eyck. — On June 24, 1903, ALFRED MARKS read a paper before the Royal Society of Literature on the collaboration of the brothers Van Eyck. His conclusion was that both brothers worked on all the pictures properly attributable to either until the death of Hubert (1426), and, indeed, that the collaboration cannot be said to have ceased until Jan had finished all the pictures begun at the time of his brother's death, ending with the completion of the great Ghent altarpiece, 'The Adoration of the Lamb,' on May 6, 1432. The main arguments are summarized and favorably criticised in the *Nation*, December 24, 1903.

Satire upon the Duke of Alva. — In *Chron. d. Arts*, September 5, 1903, p. 244, L. MÄTERLINCK describes a satirical picture representing the Duke of Alva seated on a throne surrounded by his councillors and headsmen. The Cardinal Granvelle is at his ear, inspiring him, with the aid of a bellows, with cruelty and oppression. The seventeen provinces are kneeling, loaded with chains, and the confederate nobles put finger to lip in token of silence. Other parts of the picture show the murders of the Duke's victims and confiscation of their property. The description is taken from an article written in 1838 by the Baron de Reiffenberg for the *Bulletin de Bibliophile* (Paris, Techener), in which the picture is attributed to P. Breughel. Mäterlinck was unable to find the picture, but H. HYMANS, *ibid.* October 17, 1903, p. 267, says that such a picture is in the Salle Historique of the Brussels Museum. It is not by Breughel, but of the seventeenth century.

Gérard of Haarlem. — In *Mon. Mém. Acad. Insc.* IX, 1903, pp. 73-94 (pl.; 3 figs.), C. BENOIT discusses the works and influence of Gérard of Haarlem (*Geertgen van Sint Jans*) with special reference to a fine 'Raising of Lazarus' recently acquired by the Louvre. The key to his work is given by two panels in Vienna, to which the new painting shows distinct points of resemblance. It is also of special interest as depicting the same subject as the only known picture of Gérard's master, Albert van Ouwater, founder of the school of Haarlem in the fifteenth century. This school is marked by its richness and harmony of color, and a liking for Oriental types. The position of Gérard in this school, and the characteristics shown in his pictures, are considered at some length.

ENGLAND

More Essex Brasses. — In *Reliq.* IX, 1903, pp. 145-162 (9 figs.), MILLER CHRISTY and W. W. PORTEOUS continue the description of interesting old

brasses in Essex. (See *Am. J. Arch.* V, 1901, p. 486.) This article describes nine brasses, representing men in armor, usually with their wives. They extend from the middle of the reign of Edward IV to near the end of that of Charles I, when the wearing of armor and the laying down of monumental brasses were both discontinued.

Portraits of William Harvey.—In *Athen.* September 19, 1903, W. ROBERTS publishes a catalogue of portraits of the famous Dr. William Harvey (1578–1657). Three are by Cornelius Jansen, others are by De Reyn, Bommel, W. Dobson, Mierevelt, one is attributed to Van Dyck, and there are others of somewhat doubtful attribution.

ARCHAEOLOGICAL NEWS¹

NOTES ON RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS

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GENERAL AND MISCELLANEOUS

TURKESTAN. — **Excavations at Anau in 1904.** — The expedition to Turkestan under Professor Raphael Pumpelly has been excavating at Anau. The following statement is condensed from a preliminary letter, printed by the Carnegie Institution of Washington, under whose auspices the investigation has been made. "Here at Anau, about seven miles east of Ashabad, there are two great tumuli and the ruins of a city — Anau — surrounded by moat and wall, and occupied till within the last century. The two tumuli, nearly half a mile apart, are nearly equidistant from the city, at a distance of less than a mile. The northern and older tumulus rises 40 feet above the plain; the southern and younger tumulus rises 52 feet above the plain. Both of these start with their lowest culture strata on slight elevations in the same original plain-surface — more than 20 feet below the present surface of the surrounding plain. In the older tumulus we find a culture occupying the lower 45 feet, and distinguished by the technique and decoration of its wholly hand-made and interesting pottery. This is succeeded in the upper 15 feet by a more advanced culture, in which some remnants of bronze implements and lead beads show a beginning acquaintance with bronze, while the hand-made pottery has changed and become more developed. Throughout this tumulus we have found nothing recognizable as a weapon of offence, in either stone or metal, though flint knives abound. The southern, younger tumulus starts with a developed wheel-made pottery, unpainted, and of a technique wholly different from that of

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor FOWLER, Editor-in-charge, assisted by Miss MARY H. BUCKINGHAM, Professor HARRY E. BURTON, Professor JAMES C. EGBERT, JR., Professor ELMER T. MERRILL, Dr. GEORGE N. OLCOTT, Professor JAMES M. PATON, and the Editors, especially Professor MARQUAND. In Professor FOWLER's absence these departments are conducted by Professor PATON.

No attempt is made to include in the present number of the JOURNAL material published after June 30, 1904.

For an explanation of the abbreviations, see pp. 135, 136.

the older tumulus, though some hand-made pottery occurs not wholly unlike some of the younger products of the older tumulus. From its base under the plain to its summit this tumulus has 74 feet of culture strata. There are evident here at least two successive cultures. Of these, that of the lower 62 feet is wholly in the bronze stage (but with survival of flint implements), while the upper 14 feet are marked by decided changes and by the introduction of iron, of which the wholly oxidized remnants of some implements were found.

"We have thus at least four distinct cultures occupying 136 feet, with a break in the column between the end of the old and the beginning of the new tumulus. We do not know how great this gap may be, but the presence of some fragments of wheel-made pottery on the surface of the older tumulus, as well as in the neighboring irrigation column, seems to represent a transition from the older to the newer. This suggests the possibility that the gap was filled by the strata which have disappeared through erosion, and which must, in any event, have been of considerable thickness.

"Through all the cultures except the last—that of the iron stage—there ran a remarkable and characteristic burial custom. The children, and seemingly only children, were buried in the houses, under the floor, on a layer of fire-hardened earth. The skeletons lie on the side with the knees drawn up. With them have been found beads of turquoise, lapis lazuli, carnelian, and other minerals. Eighteen such burials have been studied.

"Of course, our excavations have exposed but a fraction of the volume of either tumulus. They consisted in terracing above the plain and in large open pits and shafts below that level.

"Our finds fall into four categories:

"(1) *A vast amount of fragments of pottery*, most systematically collected by Dr. Schmidt.

"(2) *Many hundred pounds of bones*,—all that came out of the older tumulus,—which I have had separated according to heights and position in which they were found.

"(3) *Special finds* consisting of many hundred numbers. These are all the objects except the large stone implements associated with the life of the occupants of the tumuli.

"(4) *Larger Stone Implements*.—No trace of gold or silver has been found.

"The skeletons have all been studied, drawn, and photographed by Mr. Langdon Warner, who will report on the manner of their occurrence.

"In addition to the work on the two tumuli, I have sunk four shafts to the culture strata (30 to 40 feet thick) of the city of Anau, to try to determine its age relative to that of the youngest culture of the tumuli, and to get facts for use in deciding as to when irrigation was introduced. The results prove that Anau was wholly in the iron stage, while its wheel-made pottery is wholly different from any in the tumuli; but, in addition to this, fine-glazed faience was found plentifully in the upper three-quarters of all three shafts. These were not found at all in the tumuli, excepting in the case of two or three isolated and very doubtful pieces.

"In the shafts sunk to determine the depth of irrigation the greatest thickness found was 22 feet. Pottery fragments found at 19 feet depth, 6 feet below the bottom of irrigation sediments, proved that irrigation from at least that depth was not only younger than the introduction of *wheel-made*

pottery, but also either contemporaneous with or younger than the introduction of that peculiar pottery which characterizes the youngest culture of the south tumulus — the iron stage.

"As the culture strata of Anau rest on the natural plain, I sank a shaft immediately east of the city. Here the irrigation sediment rests on the same natural plain-surface that underlies the city culture strata. It is 15 feet thick, and the bottom of Anau culture is now that much lower than the surface of the surrounding plain.

"Glazed ware and glass were found to a depth of 9 feet or more in the irrigation material in this shaft."

ARABIC INSCRIPTIONS. — In *Mith. D. Pal.* V. 1903, pp. 33-70 (15 figs.), M. VAN BÉRCHEM publishes a series of mediaeval Arabic inscriptions from Syria and Palestine. Seven are from Mt. Tabor, and relate to the building of a fortress between 1211 and 1215 A.D. Two (1277, 1288 A.D.) are from the tomb of Abu 'Ubaida. Ten are from 'Adschlun and the surrounding country, dating from 1128 to 1465 A.D. Most of them relate to the erection or the renewal of buildings, but the last refers to a remission of taxes, such as seem to have been common under the Mameluke Sultans.

INDO-CHINA. — **Discovery of Ancient Jewellery.** — M. FINOT, the Director of the French School in the remote East, reports the discovery at My-Son of a number of inscriptions and sculptures, as well as a full set of gold ornaments. These ornaments are certainly not later than the tenth century, and are perfectly preserved. (*C. R. Acad. Insc.* 1903, pp. 600-601.)

NECROLOGY. — **G. von Kieseritzky.** — On January 10, 1904, suddenly died Gangolf von Kieseritzky, Curator of the Antiquities of the Hermitage, St. Petersburg. He was born at Fellin, in Livonia, studied at Dorpat and Munich, and through the influence of Stephani came to the Hermitage in 1880, and succeeded his friend in 1887. He did not publish much, except a good paper on the type of the Athena Parthenos, a brief illustrated catalogue in Russian of the marbles in the Hermitage, and a study in Russian of the antiquities of Khotan. (*S. R., R. Arch.* III, 1904, p. 411.)

U. L. Köhler. — After a long illness, Ulrich Leopold Köhler died on October 21, 1903. Born in 1838, in Klein-Neuhausen (Sachs-Weimar), he studied at Jena and Göttingen, and after 1860 for some years in Italy. His *Urkunden und Untersuchungen zur Geschichte des delisch-attischen Bundes* (1869) led to his call to Strassburg in 1872. In 1875 he was appointed first secretary of the German Institute at Athens, where he remained until 1886, when he accepted a professorship of history at Berlin. Apart from his valuable services in the early days of the Institute at Athens, in the foundation of *Athen. Mith.*, and in the publication of innumerable epigraphical and historical studies, Köhler edited the three parts (1877-88) and the Supplement (1895) of vol. II of the *Corpus Inscriptionum Atticarum*. (*Athen. Mith.* XXIX, 1904, pp. i-vii.)

A. S. Murray. — In Dr. Alexander Stuart Murray, who died on March 5, of pneumonia, the British Museum has lost an able administrator; and those who frequented his department will miss his ever ready kindness and vigorous personality, and his often caustic, but always suggestive, comments upon matters of current archaeological interest.

He was born in 1841, and, after an education at Edinburgh High School and at Glasgow University, went on to Berlin to pursue his archaeological

studies; he thus had an admirable training before entering the British Museum, in 1867, as assistant in the Department of Greek and Roman Antiquities, under Sir Charles Newton. He succeeded to the office of keeper of this department in 1886, and the years during which he held this post have been marked by the most drastic reforms in the matter of the arrangement and exhibition of the antiquities under his control. Vases, gems, bronzes, and terra-cottas have all been displayed to the best advantage. But it is above all in the sculpture galleries that the results of his activity may be seen. Here it was his object, wherever feasible, not only to place the sculptures from various Greek buildings where they could be seen with due artistic effect, but also to indicate their setting by partial restoration of their architectural framework. The Ephesian marbles offer, perhaps, the most brilliant examples of his skill in this direction, and in the case of the later temple Dr. Murray's careful study of the extant blocks has shown the proper position of the sculptured drums, and of the blocks, with sculpture in high relief, on which they rested. The catalogues of the department, though written by his assistants, were prepared under his direction and were revised by him throughout.

Dr. Murray's best-known book is his *History of Greek Sculpture*, which has appeared in two editions. His *Handbook of Greek Archaeology* (1892) was a book of slighter caliber. His most recent publication, *The Sculptures of the Parthenon* (1903), collects for the first time in a single volume adequate photographic reproductions of all the extant or recorded portions of the pediments, metopes, and frieze. (*Athen.* March 12, 1904. See also *London Times*, March 7, 1904. *R. Arch.* III, 1904, 275-277.)

S. A. Strong.—On January 18, at the age of forty, died Mr. Sandford Arthur Strong, librarian to the House of Lords, librarian to the Duke of Devonshire, and Professor of Arabic at University College, London. From St. Paul's School Arthur Strong passed to St. John's College, Cambridge, where he began the study of Oriental languages under Professor Cowell. The work that he did for the Pali Text Society and his contributions to the *Journal* of the Royal Asiatic Society gained for him a reputation among Oriental scholars, both in this country and abroad. In recent years Mr. Strong had made valuable additions to the literature relating to the history of the fine arts. Only three years ago he published his account of the drawings in Lord Pembroke's collection at Wilton. This book was followed by a similar work on the drawings in the collection of the Duke of Devonshire. Mr. Strong wrote an introduction to the catalogue of the Wantage collection, and assisted in the preparation of the two published volumes of the new edition of Crowe and Cavalcaselle's *History of Painting in Italy*. He also contributed important articles to reviews on subjects connected with archaeology and connoisseurship. In all of these writings he demonstrated that he had a keen eye and an unfailing memory. At the same time he showed that he placed a proper value upon documentary evidence, basing his conclusions on all the available testimony. (*L. D., Athen.* January 23, 1904. See also *London Times*, January 19, 1904.)

Mrs. Whitman.—The Archaeological Institute of America has suffered a grave loss in the death of Mrs. Sarah Wyman Whitman, President of the Boston Society. Mrs. Whitman was born in Baltimore, in 1842, and died in Boston, on June 24, 1904. She was the daughter of William Wyman, of

Baltimore, in whose memory she founded a fellowship at Harvard University. She became the wife of Henry Whitman, of the house of Whitman & Weston, and survived her husband three years. She took up the study of art when young, and was the pupil of Couture and William Hunt. Although a portrait-painter of much distinction, she was better known for her remarkable work in stained glass, important examples of which are in the chapel of Trinity Church, Boston, and in Memorial Hall, Cambridge. To her artistic endowments she added personal and social gifts of an unusual order, and was thus always a source of noble influences. She became President of the Boston Society of the Institute in 1897, and was for a number of years a member of the corporation of Radcliffe College, to which she left \$110,000 in her will. Unwearied in all good works, gifted with a rare power of sympathy and appreciation, generous of her time, strength, and money, and heroic in the face of approaching death, her memory will be an enduring inspiration.

EGYPT

RECENT EXCAVATIONS. — At a meeting of the Society of Biblical Archaeology on June 8, Professor A. H. SAYCE gave an account of the past season in Egypt. Items not elsewhere reported are here given. At **Abusir** Dr. Borchart has continued his work among the fifth-dynasty tombs. An examination of the site of **Buto** by Professor Petrie was disappointing, everything there of an early date having been plundered and destroyed in the Roman period. At **Gharak**, in the Fayûm, however, Mr. Loat discovered a temple of the time of Thothmes III in a fair state of preservation, and containing many stelae. At **Oxyrhynchus** Dr. Grenfell and Dr. Hunt have once more gleaned a considerable harvest of papyrus fragments, many of them of a theological character. At **Bawit** M. Clédât has made copies of interesting Coptic frescoes of the seventh century. At **Karnak** M. Legrain has discovered a *cache* containing nearly three hundred statues of all periods, from the time of the twelfth dynasty to the Roman era. Among them is a portrait of Amenemhat III with Hyksos features. Dr. Mond has continued his useful work of clearing out the tombs on the west bank at **Thebes**. Dr. Schiaparelli has discovered the tomb of Bint-Anat, daughter of Rameses II, with well-preserved inscriptions. Mr. Howard Carter is getting on well with his work of clearing out the extensive granaries of the Ramesseum. At **El-Kab** Mr. Somers Clarke and Professor Sayce have brought to an end the excavations which have now extended over eleven years, settling the earlier history of the place and of its great walls, and discovering a tomb of the twelfth dynasty in the hill to the north of the old town. Professor Sayce has also superintended excavations at **Elephantine**, for the Cairo Museum, which have resulted in the discovery of papyri and various small objects. (*Athen.* June 11, 1904.)

ABUSIR. — **German Excavations.** — *Berl. Phil. W.* 1904, coll. 284-285, contains a report of the work at Abusir in 1902-03. It adds to the account already published (*Am. J. Arch.* VII, 1903, p. 360) chiefly a brief notice of the opening of a number of graves. One yielded a set of magical instruments. Graves of the Middle Empire were found to contain quantities of grain. The excavations at the pyramid of King Ne-woser-re are very instructive, as the successive stages of construction can be clearly traced.

AHNAS.—**Excavations of the Egypt Exploration Fund.**—During the season of 1903–04 W. M. FLINDERS PETRIE has been excavating at Ehnasya, or Ahnas (Heracleopolis), about sixty miles south of Cairo. It was the home of the ninth and tenth dynasties, about whom little is known. The chief work was the clearing in part of a temple, which in its present form is mainly the work of Rameses II, though there are remains of two earlier buildings, probably of the eighteenth and certainly of the twelfth dynasty. Among the small objects found is a fine gold statuette of the local god, Hershefi, bearing on its base an inscription of King Pef-dudu-bast of the twenty-fourth dynasty, which furnishes his throne name, Nefer-ka-ra. Many burned houses of Roman times were examined and dated by coins found in them, and a chronological series of Romano-Egyptian lamps has been photographed for publication. (*London Times*, May 10, 1904.)

BENI-HASAN.—**Tombs of the Middle Empire.**—In a letter to the *London Times*, June 29, 1904, J. GARSTANG describes his work at Beni-Hasan during 1903–04. He has excavated a whole necropolis of the Middle Empire, representing a phase of Egyptian civilization before 2000 B.C., and has taken over one thousand photographs of funeral chambers and their contents. New texts and chapters of Egyptian ritual have been recovered, but the chief interest lies in the numerous models in wood, which illustrate the domestic, agricultural, and industrial customs at the end of the feudal period. There are also actual implements, as a drum, flutes, a harp, boomerang, a bronze battle-axe with a wooden handle, and a bow with arrows tipped and feathered. Several fine decorative paintings were found, and a small but good portrait-statue of a private citizen walking with a staff.

DEIR-EL-BAHARI.—**Excavations of the Egypt Exploration Fund.**—The *London Times*, April 23, 1904, contains a long letter from E. NAVILLE and H. R. HALL, describing the excavations at Deir-el-Bahari in 1903–04. The work was carried on to the south of the temple of Queen Hatshepsu, and laid bare the most ancient shrine yet discovered at Thebes,—the funerary temple of King Mentubetep Neb-kheru-rā of the eleventh dynasty (c. 2500 B.C.). There are many sculptured slabs from the walls of the pillared hall, which originally showed the coronation of the king, his reception of magnates and warriors, servants engaged in various occupations, etc.; all of value for the history of art during this period. Some are rough, but others are equal to the best work of the next dynasty. The remains of the temple show that Hatshepsu's architects copied the older building. The temple did not fall into ruin until the Ramesside period or later. The letter gives also the dimensions and description of the remains so far as uncovered, but as yet only the northeast part of the platform has been cleared. An article by E. NAVILLE in *Le Journal de Genève* was translated in the *Boston Evening Transcript*, June 18, 1904.

GIZEH.—**American Excavations.**—Dr. Reisner, working for the University of California, is now busy in the necropolis near the pyramids of Gizeh. West of the Great Pyramid about seventy mastabas, containing over three hundred burial pits, are already laid bare. Three periods can be traced, extending from the third to the seventh dynasty. Comparatively few portable objects have been found, but in one corridor is a series of fine reliefs on thin stucco. In the valley north of this necropolis has been found

an untouched cemetery of an earlier period, with simple mud-brick tombs, apparently belonging to poor people. (H. N. F., *Nation*, March 24, 1904.)

KARNAK.—**A New Statue.**—In *Rec. Past* III, 1904, pp. 116-117, (fig.), LUCIEN C. WARNER publishes a photograph of a group in black granite recently found at Karnak. It represents a seated man and woman with a small figure standing between them. It is said to be the statue of Sennofer, with his wife and daughter.

A Greek Inscription.—HERON DE VILLEFOSSE in *B. Soc. Ant. Fr.* 1902, pp. 357-360, publishes a Greek inscription found in the southeast angle of the great court at Karnak. It contains, in three columns, much mutilated, the names of natives who had distinguished themselves in athletic contests. It seems to be no earlier than the second century of our era.

MITHRAHINE.—**A Statuette of Aphrodite.**—In *R. Arch.* III, 1904, pp. 374-381 (pl.; fig.), S. REINACH publishes a statuette of Aphrodite belonging to Mr. Dattari in Cairo, and said to come from Mithrahine. It is one foot high and of careful workmanship, evidently the product of one of the Greek studios which flourished from the third century B.C. in Lower Egypt, and whose artists seem to have copied almost exclusively Attic works of the fourth century. The figure belongs to a well-known type, where the drapery, held in the right hand, covers the right leg and the back, and hangs over the left arm. In many copies, such as the large one in the Vatican (Helbig, *Führer*², No. 146), Eros appears at the left side of the goddess. This group was dedicated to Venus Felix about 150 A.D. The Dattari statuette shows it is derived from a Greek original, probably by Praxiteles, as it resembles the 'Aphrodite' of Cnidus. The temple of Felicitas contained at least one 'Aphrodite' by Praxiteles, and also other works of his brought from Thespieae. It is possible that the original was a bronze group of Aphrodite and a mellephebic Eros made for Thespieae.

NAGA AD-DEIR.—**Excavation of a Necropolis.**—During the past winter Messrs. Lythgoe and Mace have continued the excavation of the vast necropolis at Naga ad-Deir, for the University of California. Thousands of tombs have been opened, belonging to all periods from prehistoric times to the twelfth dynasty. The tombs continue to the eighteenth, and there are also tombs of the New Empire, Ptolemaic, and Roman times. In the early tombs the bodies were laid upon a matting in a contracted position and were covered by a second matting. The remains have frequently been disarranged by robbers, but there is no evidence of dismemberment or cannibalism. As all parts of the human body have been found, Dr. G. Elliott Smith has been able to study the physical qualities of the people through a long period. He believes that they show the presence of a single race at this point from the earliest prehistoric times to the twelfth dynasty, and probably to the present time. (H. N. F., *Nation*, March 24, 1904.)

NEGADAH.—**An Important Discovery.**—During a short campaign at Negadah Mr. JOHN GARSTANG found the missing corner of the tablet bearing the name of Aha (Menes), found some years ago by De Morgan. He also found a duplicate of this tablet and three smaller ones of ivory. On one of these tablets appears the name of Aha in association on the one hand with Prince Narmer, already known from carvings found by Quibell at Hieraconpolis, and on the other with Princess Neith-Hetep. (London *Times*, June 29, 1904; *Athen.* July 2, 1904.)

NORTH DELTA NOMES. — An exploration of the northern parts of the Nile Delta in search of "Aegean" remains has proved fruitless in that respect, but has resulted in completing the map of the region with additional mounds, identifying the probable limits of three nomes and some of their more important cities, especially Buto, Phragon, and Diospolis Inferior, and in tracing the ancient courses of the Nile. The present Damietta mouth is not one of these, but the artificial Diolcus. (D. G. HOGARTH, *J.H.S.* XXIV, 1904, pp. 1-19; map.)

THEBES. — Italian Excavations. — The *Voss. Zeit.* reports that Schiaparelli's excavations in the Theban necropolis have brought to light the tomb of the queen of Rameses II, containing five chambers covered with inscriptions and paintings of far better execution than those in the tomb of the king. The sarcophagus had been opened and the tomb plundered. The tomb of Prince Amonhotepfu, son of Rameses III, also contained five paintings. The mummy of Princess Aamesit, daughter of an unknown king of the seventeenth dynasty, Lekuenza, has also been discovered. (*W. klass. Phil.* 1904, col. 502.)

Tomb of Queen Hatshepsu. — The passage to this tomb (see *Am. J. Arch.* VIII, p. 97), known as No. 20, was opened for 56 m. by Lepsius, but the difficulties were so great that the work was abandoned. The whole passage (194 m.) was found full of boulders and a breccia almost harder than the rock itself. The passage after a short distance suddenly curves to the south, and after 60 m. again to the west. At a distance of 56 m. is a chamber, at 60 m. farther a second, and after 36 m. more a third, whence a passage curves inward to a burial chamber containing two sandstone sarcophagi, highly polished and covered with hieroglyphics. One belonged to Thothmes I, the other to his daughter, the Queen Hatshepsu. Both were empty, as was to be expected, since the mummy of Thothmes I was found at Deir-el-Bahari. The other mummy may be in a side chamber, as the tomb and its numerous chambers are not yet cleared. The sides of the chamber were coated with painted limestone slabs. (*London Times*, March 15, 1904; also *Voss. Zeit.* in *W. klass. Phil.* 1904, col. 421.)

A Rock Tomb with Paintings. — In *Nation*, July 7, 1904, F. H. HERICK describes in detail the paintings in a rock tomb recently opened by R. Mond at Thebes. It is probably of the eighteenth dynasty, and seems well preserved. The vestibule contains a series of scenes representing agricultural operations, and in the tomb chamber is a fine picture of duck hunting and fishing in the marshes.

GREEK PAPYRI. — In *Atene e Roma*, VII, 1904, coll. 32-42, 86-89, 120-126, 178-180, G. VITELLI continues the publication of Greek papyri from Egypt. (See *Am. J. Arch.* VII, 1903, p. 363.) The first papyrus published is a sheet from a treatise *περὶ παλμῶν*, giving the signification of involuntary movements of the body and the divinity to be propitiated in each case. Four columns are preserved, but two are badly damaged. (See also *Nation*, May 26, 1904.) The second article contains a contract between the *ἀρχεφῶδος* of Ibion Sesymbothis and the two managers of a company of pantomimes. The other articles contain shorter documents: two letters to the governor of the Apollonopolitan nome, and three private letters, as well as a mutilated fragment, showing five occurrences of the *παράγραφος* in thirteen lines.

ASSYRIA AND BABYLONIA

ASHUR.—**German Excavations.**—According to the *Mitteilungen der Deutschen Orient-Gesellschaft*, work has been begun at Kal' at-Shirgat, the ancient Ashur, the original capital of Assyria. The Code of Hammurabi shows it was in existence as early as the twenty-third century B.C.; and the German discoveries indicate that it did not lose its importance with the transfer of the Assyrian capital to Calah, about 1300 B.C., but was occupied as a residence city by Assyrian kings and continued to be of great importance down to the seventh century B.C., if not later. (*Nation*, March 10, 1904.) Of single objects the most important is a basalt statue of King Salmanassar II. The head is half destroyed, but most of the inscription is preserved. It relates that a temple of Ashur, which had been repaired after 159 years, and then, after 580 years, had been destroyed by fire, had been rebuilt in greater splendor by the king. This temple seems also to have been found. (*B. Phil. Woch.* 1904, col. 863.)

BABYLON.—**The Gate of Istar and Other Discoveries.**—KOLDEWEY has reported the detailed plan of the gate of Istar. It was a double gate, with two similar buildings, and in general of the type found at Sendschirli. Noteworthy is its decoration with reliefs on enamelled bricks. There seem to have been at least eleven rows of the reliefs, of bulls or dragons, one above the other. The lowest was covered when the street was raised, but its surface was carefully protected. (*Berl. Phil. W.* 1904, col. 444.) The excavations have brought to light many inscribed tablets at the Kasr. In the temple of Niumach the foundation of the statues has been examined. At the hill "Homera Südwest" the remains of a Greek or later theatre have been partly excavated. (*Ibid.* 1904, col. 863.)

FARA AND ABU HATAB.—**German Excavations.**—At Fara fifteen trenches have been dug, some of considerable length. The graves are sarcophagi, or contain several bodies. The dead lie on the side, with bent knees, holding a drinking vessel to the mouth with the right hand. Drinking vessels and pitchers are the chief gifts in the graves. At Abu Hatab the necropolis is younger. The dead are often buried in coffins formed by two large pots, which in some cases had been previously used for the same purpose. (*Berl. Phil. W.* 1904, col. 284.)

TELLO.—**The French Excavations.**—In *C. R. Acad. Insc.* 1903, pp. 618-629 (fig.), L. HEUZÉY reports briefly on the new campaign at Tello, begun January 4, 1903, by Captain Cros. The first work was a continuation of the old excavations, and much of interest was found. The report gives details of only one discovery. A small headless statue was found in the Tell of the Tablets (V), bearing an inscription of Gudea. When received at the Louvre it proved to be the body of a head found by De Sarzec. This head wears a sort of turban, which seems to have been a mark of dignity. The head is disproportionately large for the body, which seems to have been regarded by the artist as little more than a pedestal. The inscription, which is published in facsimile, transliteration, and translation of Thureau-Dangin, contains a dedication to the god Nin-ghiš-zida, son of the god Nin-a-zou. *Ib. Ibid.* 1904, p. 56, reports the discovery of polychromy in early Chaldaean sculpture, of a relief representing the miracu-

lous fishing of Izdubar, and a carved shell with the figure of King Ur-Nina. Among the inscriptions are documents showing connections between Sirpurla and other Chaldaean cities, including the biblical Erech.

SYRIA AND PALESTINE

ANTIOCH.—*Inscriptions and Seals.*—In *R. Ét. Anc.* VI, 1904, pp. 31–36 (4 figs.), V. CHAPOT publishes five Greek inscriptions, three Byzantine seals, and a coin from Antioch. The inscriptions are sepulchral, and one is of interest as showing a funeral table—a design rare in Greek lands, though common in Africa and Latin-speaking countries. The coin is of the empress Zoe (1041 A.D.), and seems unique.

BEERSHEBA.—*The Era of Eleutheropolis.*—In *C. R. Acad. Insc.* 1904, pp. 54–55, CLERMONT-GANNEAU discusses some Christian epitaphs of the sixth century from Beersheba, which are accurately dated by day, month, indiction, and year of the era of Eleutheropolis. It is thus possible to fix that era as dating from 199 A.D., which must be the year of the visit of Septimius Severus to Palestine and Egypt. Mention in the inscriptions of a date *κατὰ Ἀραβας* refers to a special calendar, known from the *Hemerologion* of Florence. It began on March 22, Julian, and contained twelve months of thirty days and five intercalary days. *Id. Ibid.* 1904, pp. 63–65, publishes another inscription from the same neighborhood, which seems to combine the “Arabian” calendar with the era of Gaza. The note also reports the examination of over three hundred tombs near the ancient Eboda, including apparently the tomb of the deified Nabataean king, Obodas, and one decorated with animal paintings like those at Beit Djibrin.

BEIRUT.—*A Roman Seal.*—In *B. Soc. Ant. Fr.* 1902, pp. 341–344 (fig.), HÉRON DE VILLEFOSSE describes a lead seal bearing the laureated beardless head of an emperor and the inscription, *Aemilio* | [*I*]unco | [*p*]ro-*c(uratore) Aug(usti)*. A similar lead seal from Beirut has been published in *B.C.H.* III, 1879, p. 271. The seal belongs to class 5 of Rostoutsew, *Étude sur les plombs antiques*, and is the fourth known to bear the name of an official. A fifth example was bought by the speaker at the sale of the Manalakos collection. It is, however, much mutilated.

DAMASCUS.—*A Mounted Syrian God.*—In *C. R. Acad. Insc.* 1904, pp. 8–12 (fig.), FATHER RONZÉVALLE publishes a rude bas-relief, found near Damascus, representing a mounted divinity, in the costume of a Roman cavalry officer, a whip in his right hand, a club in his left. The head is surrounded by a heavy mass of hair. It is not to be interpreted as a representation of Maximian-Herculus, or any other emperor, but is certainly an Oriental god, a Helios-Hercules, product of the late Syrian syncretism.

GEZER.—*Recent Discoveries.*—The last quarterly statement of the Palestine Exploration Fund contains the sixth report of the English excavations at Gezer (August 16 to November 16, 1903). The principal work of the last quarter has been the excavation of a huge rock-cut cistern, capable of containing four million gallons of water, which, from the objects found within it, Mr. Macalister ascribes to the Maccabean period. To an earlier time belong a number of “Astarte plaques.” Still earlier was “an adult human foundation sacrifice” of a woman, the first found on this site. Mr. Macalister also reports the discovery of the necropolis of the Seleucid period, on the hillside to the north of the town. But here, as elsewhere, the tombs

or graves of the Hebrew period remain as yet undiscovered. (*Nation*, February 18, 1904.) On the 20th of May, Mr. Macalister, excavating for the English Palestine Exploration Fund at Gezer, on the road from Jaffa to Jerusalem, reported the discovery of a fragment of a tablet written in cuneiform characters, thirteen lines on one side, five on the other, with seal impressions between. This is the sixth tablet inscribed in cuneiform characters from the pre-Israelite period, approximately 1400 B.C., discovered to this date in Palestine. The first was found by Dr. Bliss at Lachish; and four (three of clay, and one of stone), by Dr. Sellim at Ta'anach, four miles east of Mutsellim. (*Ibid.* June 30, 1904.)

JERUSALEM. — Greek and Latin Inscriptions. — In *C. R. Acad. Insc.* 1903, pp. 479-495 (4 figs.), CLERMONT-GANNEAU publishes eleven inscriptions from the museum of the Convent of St. Sauveur. Two are forgeries, three have been already published, and two are mere fragments. Two others are sepulchral, — one Christian, the other Hebrew. All the foregoing are in Greek. The last two are Latin, apparently from two monumental dedications: one in honor of Hadrian; the other, by detachments of three legions, — II (Traiana Fortis), X (Fretensis), and XII (Fulminata), — in honor of an unknown emperor, probably Antoninus Pius or Marcus Aurelius.

SIDON. — German Excavations. — The Νέον Ἀστὺ reports that, near Sidon, Winkler has discovered votive offerings apparently belonging to the Temple of the Sun. He has also found many fragments of inscribed Phoenician tablets, part of an Egyptian inscription of the fourth century B.C., and remains of many Greek marble statues of boys. The place seems to have been plundered. (*W. klass. Phil.* 1904, coll. 198.)

Three Painted Stelae. — In § 15 of his 'Syriaca' (see *Am. J. Arch.* VII, 1903, p. 370, and *infra*, p. 377), in *R. Arch.* III, 1904, pp. 234-244 (3 figs.), P. PERDRIZET publishes three painted sepulchral stelae, found in 1897 at Sidon, and now at Constantinople. They marked the graves of mercenary soldiers, and seem to belong to the Hellenistic period. Two have only the figure of the deceased; the third, the deceased taking leave of two comrades. Two have fragmentary Greek inscriptions.

TELL EL-MUTSELLIM. — German Excavations. — At Tell el-Mutsellim (probably Megiddo) the German excavators have found a large rock tomb with many chambers, containing many fine painted and unpainted vases. (*Berl. Phil. W.* 1904, col. 444.) They are also reported to have discovered a fine jasper seal, having as device a lion marching, with the inscription, above and below, in very old Phoenician characters, "of Shema, the servant of Jeroboam." Presumably it was the seal of the governor of the city under King Jeroboam; but which Jeroboam it is not possible to determine. This seal possesses a peculiar value because it is the first object found in the excavations in Palestine bearing a well-known biblical name. It was found in March. (*Nation*, June 30, 1904.)

A JOURNEY IN CENTRAL SYRIA. — RENÉ DUSSAUD's *Mission dans les Régions désertiques de la Syrie moyenne*, in collaboration with FRÉDÉRIC MACLER for the itinerary, is extracted from *Nouvelles Archives des Missions Scientifiques*, vol. X (Paris: Imprimerie Nationale). It contains a short statement of the route, with archaeological notes; a study of the locality as to character of the soil, nature of the ancient populations

and their cultivation; a collection of 904 Safaite inscriptions; a complete Safaite glossary and onomasticon for all the published inscriptions; 180 Greek and Latin inscriptions; 20 Nabatean inscriptions, and 33 Arabic;—all carefully indexed. Many of these consist of a word or two, and most of proper names only, yet among them is the five-line Nabateo-Arabic inscription of en-Nemara, of 328 A.D., in the Nabatean character and strongly marked with Aramaisms, but at bottom good classical Arabic, and thus, so far, our earliest specimen of the language of the Qur'an. The next in date seems to be the trilingual of Zebed, of 512 A.D. (*Nation*, January 14, 1904.)

THE ROMAN ROAD FROM BOSTRA TO PHILADELPHIA.—

Father Germer-Durand has traced the course of the road built by Trajan between Bosra and Philadelphia, as a section of the great road from the Syrian frontier to the Red Sea. South of Philadelphia the road cannot certainly be traced; and northeast of Bosra, though the pavement is well preserved, not a milestone has been found. In the region between the cities the explorer has found and collected the unpublished inscriptions of sixty milestones. One gives the full name and titles of Vaballath, son of Zenobia (270–271 A.D.). He has also collected twenty-five new Greek and Latin, and three new Nabatean, inscriptions. (HÉRON DE VILLEFOSSE, *C. R. Acad. Insc.* 1903, pp. 597–599.)

ASIA MINOR

COS.—**The Campaign of 1903.**—Excavations at the Asclepieum were carried on for two months last year, and brought the work to a point from which it can be finished in a single longer season this year. Some further clearing has been done on the southern and highest terrace, where the great temple stood, and this terrace is found to have been closed by porticoes at both east and west ends. On the middle terrace the small temple (B) is proved to be the earlier temple of Asclepius by the discovery of a curious receptacle in the floor of the cella and of an inscription relating to it. This is the *θησαυρός*, into which contributions for the expenses of the great festival were dropped through a hole in the cover. The square, Roman building next to temple B can only be conjecturally named *ἱερὸς οἶκος*. The plan of the great altar east from and facing temple B is somewhat modified, but still almost nothing is found of the superstructure. Temple C, behind the altar, has in its foundations poros blocks from a still earlier temple of Asclepius. This site, occupied by a temple for the Roman emperors, may have belonged originally to the worship of Apollo. No porticoes shut in the ends of this terrace. The lowest and northerly terrace was apparently the centre of the great water-cure establishment that sprang up in early imperial times. To this period belong the remains of several fountains, including the Sacred Fountain, in the wall supporting the middle terrace. The other three sides of the slightly irregular quadrangle are formed by colonnades, which seem to have undergone numerous restorations. The whole site has suffered repeatedly from violent earthquakes. Against the outside walls of these porticoes, houses and rooms of various kinds were built on a still lower level. A large building here, which has been partially rebuilt as a museum and dwelling house for the excavators, was a church in early Byzantine times, when the whole site was covered with scattered dwellings, and may have been originally a bath house, but is

not in any case earlier than the fourth century of our era. At that time the place was already ruined as a pagan sanctuary, and given over to the Christians. The remains of bronze and marble sculpture are fragmentary, but not wholly lacking in value. The greatest interest, however, attaches to the new inscriptions, of which there are more than 170, illustrating in the widest sense the political and social life of the island. One, from the spring of 278 B.C., relates to thank-offerings at home and at Delphi, for the repulse of the Gauls from the latter place in the previous year. Others are letters from foreign states and kings in regard to the establishment of the quadrennial festival of the Greater Asclepieia, about 260-250 B.C. To this time the great temple (A) must belong. Lists of victors, of about 200 B.C. and earlier, give a series of fourteen musical and athletic contests, some of which were divided into classes for different ages. To the third and second centuries belong some honorary decrees which show the services rendered in other cities and lands by Coan physicians from the school of the Asclepieum. (R. HERZOG, *Arch. Anz.* 1903, pp. 186-199; plan; 3 figs. See also S. REINACH, *R. Arch.* III, 1904, pp. 128-131.)

CYZICUS.—**Notes on the Topography.**—In *J.H.S.* XXIV, 1904, pp. 135-143 (map), F. W. HASLUCK and A. E. HENDERSON describe some features of the topography of Cyzicus. They deal chiefly with the circuit wall, in which all stages from the fourth century B.C. to the fourteenth of our era are represented, but touch also on the theatre, the Temple of Hadrian, the harbors, the aqueduct, and the causeways that connected the original island with the mainland. The temple, of which only the sub-structures remain, was probably planned much like the smaller temple at Aezani, with 8×15 columns, a wide central intercolumniation, and a deep eastern porch. The theatre, a Greek embanked structure, was enlarged with a rubble superstructure in Roman times. The article includes a bibliography.

Inscriptions from the Neighborhood.—Sixty-five new inscriptions or parts of such are published by F. W. HASLUCK in *J.H.S.* XXIV, 1904, pp. 20-40 (3 figs.). A large number are gravestones from imperial and Christian times, but there are also public stelae and dedications, some as old as the fourth century B.C. A hail-god, Zeus Chalazius, appears at the Thracian Village, which is known from Plutarch as the site of Lucullus's camp in the Mithridatic siege. Here is also an example of a dedication to the god and the villagers in common, not an unnatural thought in a simple community worshipping an ancestral hero or earth-god. At Hodja Bunar there seems to be a trace of the Hipparchate of Drusus, the son of Germanicus, who was murdered by Tiberius in 33 A.D.

EPHESUS.—**Recent Austrian Excavations.**—The Austrian excavations were resumed in 1902, and the results of the campaigns of the autumn months of 1902 and 1903 are reported by R. HEBERDEY in *Jh. Oesterr. Arch. I.* VII, 1904, Beiblatt, coll. 37-56 (6 figs.), from the *Anzeiger der phil. hist. Classe der Akad. der Wiss. Wien*, March 16, 1904. While further examination was made of the ancient quays, and search for traces of earlier streets beneath the Arkadiane, the chief centres of work were east of the so-called Roman Agora and at the Greek Agora. At the former point it was found that a propylaeum led from the Agora into a large, open, rectangular space apparently 200 m. by 240 m. in extent. This space was entered at the southwest corner from the Arkadiane, and seems to have been surrounded by a wall

and triple row of columns, forming a broad aisle and two narrower side aisles. It evidently was laid out at the same time as the Agora. An inscription shows that the marble panels on the wall were given by the Asiarch C. Claudius Verulanus Marcellus probably early in the reign of Hadrian, but the whole structure seems to belong to the time of Domitian. Whether it is rightly called an Agora is uncertain. Many inscriptions and sculptures were found in later walls, including one relating to an ἀντιγραφεῖον, with a list of fees paid for certificates of birth and other copies of documents. At the Greek Agora a handsome late Hellenic gateway was found at the west across the end of a street. It was altered during the reign of Domitian, and the inscription recording this fact also proves that the place was really an Agora, and contained a horologium, of which the foundations seem to have been found. At the southeast corner of this Agora was found another somewhat peculiar gateway, shown by its inscription to have been erected by Mazaeus and Mithridates in the year 4-3 B.C. in honor of the imperial family, whose statues seem to have been placed within. In front of the gateway was a paved space, and on the left steps leading to a building identified by an inscription as a library, given by Ti. Julius Celsus Polemaeanus, consul 92 A.D. Only the east side has been cleared, but a number of allegorical figures have been found. In late Roman times the entrance was closed, and on the lowest step were erected some large marble reliefs taken from another monument. There are thirteen slabs, 2 m. high and about 18 m. long. Represented are battle scenes between mounted barbarians and foot-soldiers in classic armor, a sacrifice, and divinities. They are Roman work, but show the influence of Greek tradition. Many slabs recall the Ara Pacis.

LYSTRA. — In Part III of a first report of a journey in Pisidia, eleven Latin, twelve Greek, and one bilingual inscription from Lystra, with corrections in some of Sterrett's and a sketch-plan and view of the mound at Zoldera that marks the site of the ancient city, are published by H. S. CRONIN in *J.H.S.* XXIV, 1904, pp. 113-124 (3 figs.).

MILETUS. — **Excavations in 1902-1903.** — T. WIEGAND's third preliminary report on the German excavations at Miletus, comprising the results of the seven months' campaign of 1902-1903, is published in *Arch. Anz.* 1904, pp. 2-10 (plan; 6 figs.). Most important is the work at the theatre, which is one of the largest in Asia Minor. The auditorium, with three ranges of seats entirely of marble, and with passages and stairways both open and covered, is well preserved and has been fully excavated. The Roman stage buildings are not yet entirely free, but the plan of the Greek buildings has been made out. The present structure is Roman and is much larger than the Greek, but rests in part on the Hellenistic supporting walls. Among the inscriptions belonging to the earlier period are two marble calendars, such as were put up in the theatre for the information of the public. One is of the year 109 B.C. They have the numbers of days for certain periods on movable blocks, which were put into place by pegs and changed at intervals. These are the first of the "peg calendars" to be found. One of them quotes Endoxus and other writers in regard to the weather. A signature of the sculptor Silanion by its epigraphic characteristics supports Pliny's statement of his date. There are two periods of Roman building. The first, of the time of Trajan and Hadrian, shows excellent work, with some peculiarities of ornament, such as the use of mythological figures in the

decoration of the capitals, which are traced to pre-Roman times in the temple at Didyma. Pergamene influence is strong. An inscription in the upper part of the building records a dispute about the supervision of the work, which was settled by reference to the oracle. The second and rather late Roman restoration was done with material from an archaic building, possibly a temple of Athena, from which come some very finely carved decorations and an inscription to the goddess. A sanctuary of Eumenes II, containing an honorary statue set up in recognition of his services in defending Ionia from the barbarians, has yet to be placed. The blocks of the basis, inscribed with his letter setting forth the circumstances, have been found. Another important discovery is a second and larger agora, south of the bouleterion. It is a Greek stadium (164 m.) in width and of still greater length. The porticoes are of later construction than those of the smaller agora near the Lion Harbor. A splendid gate faces on the same square as the Council House and the Nymphaeum. An inscription dates this last building in the reign of Titus. Others disclose the existence of a sanctuary of the θεός ψυχρός, of a guild of gardeners, and of an organization of mussel gatherers. Much work has been done in clearing the colonnades that surround the Lion Harbor and neighboring monuments. The shrine of Apollo Delphinus, the ancient harbor-god of the city, has been found beside the port. The greater part of the remains so far discovered belong after the destruction by Alexander, but glimpses of the earlier city are not lacking. A great harvest of inscriptions has yet to be studied and published. (See *Am. J. Arch.* VI, 1902, pp. 64, 353; VII, 1903, pp. 109, 368.)

PERGAMUM.—**The German Excavations.**—The excavations at Pergamum continued from the beginning of September to the middle of November, 1903. The work was continued along the street leading from the lower agora to the gymnasium, where a row of shops and a large house were discovered. The house was of the Greek period, but had been altered and decorated with colored marble in Roman times. In the gymnasium the arched entrance to the middle terrace, and this terrace, were cleared, showing a long open space for exercise, surrounded by colonnades, exedrae, and rooms. Among the sculptures are a frieze with theatre masks, and a copy of the 'Hermes' of Alcámenes, identified by an inscription on the shaft. (W. D., *Athen. Mitth.* XXVIII, 1903, pp. 477-478.)

SAMOS.—**Excavations at the Heraeum.**—The excavations conducted by Kavvadias and Sophulis have made good progress. The east front, the larger part of the west front, the bases for the inner columns of the north side, and the eastern part of this cella wall have been cleared. The dimensions of the building are now fixed at 111.95 m. long by 56.25 m. broad. It was a dipteros, with eight columns on the east front and twenty-four on the sides, as well as a prostyle arrangement in front of each cella, thus giving three rows of columns at the ends. Curiously, however, at the west end there are nine columns, probably in order to shorten the architrave blocks. The absence of an entrance at this end rendered the odd number of columns possible. (H. S., *Athen. Mitth.* XXVIII, 1903, p. 471; cf. H. N. F., *Nation*, May 5, 1904.)

SYME AND RHODES.—**Inscriptions.**—In *Jh. Oesterr. Arch. I.* VII, 1904, pp. 81-94 (3 figs.), F. HILLER VON GAERTRINGEN publishes eight inscriptions from the reports of D. CHAVIARAS and S. SARIDAKIS.

The former sends six inscriptions from Syme, of which one is the upper part of the stele published by him in *Ibid.* V, 1902, pp. 18 ff., No. 6. It is a long honorary decree, and raises some puzzling questions regarding the Rhodian δᾶμοι. The other inscriptions are sepulchral. Chaviaras also sends a dedication to Zeus from a small island south of Syme, now called (τὸ) Σεσκλί or (τὰ) Σεσκλιά, which is a corruption of the ancient name Τευτλοῦσσα (Attic) or Σευτλοῦσσα. Kiepert is wrong in identifying this island with Alimnia, north of Rhodes. Saridakis sends a long honorary inscription from Rhodes. It is of the time of Caracalla or later, and praises a rich citizen for his gifts to the Senate, certain officials, and the people. It proves conclusively that the month Petageitnios fell in the winter, and Dalios in the summer.

TRALLES. — A Marble Relief. — In *C. R. Acad. Insc.* 1904, p. 46 (fig.), S. REINACH reports the excavation, by Edhem Bey, at Tralles of a part of a gymnasium, and the discovery of a series of inscriptions and a fragment of a marble bas-relief. It represents a man kneeling beneath a tree, and busy with a rope attached to a ring fixed in a rock. It is the first certain example of the "picturesque" relief found in Asia, but it is probable that this region, rather than Alexandria, is the source of this group of works.

THRACE

APOLLONIA. — The Last Kings of Thrace. — In *R. Ét. Gr.* VI, 1904, pp. 212–218, G. SEURE publishes a fragmentary Greek inscription from Apollonia, which throws much light on the last kings of Thrace and the Pontus. It is a dedication to Apollo ἱγρός in behalf of King Rhoemetaces, son of Cotys, grandson of Rhoemetaces, and his wife Pythodoris, daughter of Polemon. The same royal pair seem named in an inscription of Vizye. Rhoemetaces is the last king of Thrace, assassinated in 46 B.C. by his wife. After a discussion of the kings of Thrace and the Pontus, a genealogical tree of both families is given.

COSTIEVO. — A Tumulus. — In *C. R. Acad. Insc.* 1903, pp. 644–646, M. COLLIGNON summarizes the further work of Degrand in excavating the Thracian tumuli (see *Am. J. Arch.* VII, 1903, p. 370). During 1903 he excavated the tumulus at Costievo, called Monaster Moghila, finding three strata of early burials, as well as graves of the Roman period. The two earlier strata showed the same civilization as the graves near Yamboli, though with some negligence in details, as if the funeral rites were less carefully performed. The third series of burials showed a transition from this period. The body was sometimes interred in a terra-cotta jar, and the vases found were better made. There were indications of modifications in the funeral rites.

JANINA. — A Slab with Engraved Designs. — In *Jh. Oesterr. Arch.* I. VII, 1904, pp. 139–141 (2 figs.), R. MÜNSTERBERG publishes a curious stone slab found at Janina in 1895, and now in the museum at Sarajewo. On both sides are a number of sunk designs, — youthful and bearded heads, a youthful 'Eros,' 'Fortuna,' etc., — arranged in no special order. It seems likely that it is the work of a student of engraving, who practised in this softer material. A similar piece has been published by CAYLUS (*Recueil d'Antiquités*, IV, p. 293, pl. 89), who suggests the same interpretation.

MELNIK. — A Relief of the Thracian Dionysus. — In *R. Arch.* III. 1904, pp. 19–27 (pl.), P. PERDRIZET publishes a small relief recently given

to the museum at Brussels. It was described by MORDTMANN in *Athen. Mitth.* 1896, pp. 100-101, as at Salonica, whither it had been brought from Menlik, near the ancient Orbelos, in the country of the Maedes. It represents Dionysus on horseback, accompanied by Pan, hunting in a vineyard. In the branches of the great vine which fills the background are children, while below is Silenus plucking grapes. The inscription reads, Κλανδιανὸς Πύρρος καὶ Πύρρος [M] ἄνδρον, καὶ οἱ περὶ αὐτοὺς ἀλτάριοι (?) θεῶν Ἀσδον-λητῶ, 15 μς' ἔτι (246 after Actium, 215 A.D.). The word ἀλτάριοι is unknown, though ἀλτάριον = altar is found in the Byzantine period. Perhaps it should be σαλτάριοι = saltarii, defined as ἀγροφύλακες. A mounted 'Dionysus' is not found in Greece, but Thracian gods, like the nobles, are represented on horseback and hunting. This is also the explanation of similar representations of Anatolian gods, such as Men.

SERVIA.—**Inscriptions.**—In *Jh. Oesterr. Arch.* I. VII, 1904, Beiblatt, coll. 1-12, N. BULIĆ publishes thirteen Latin inscriptions from Moesia superior and Dalmatia, and describes briefly seven sculptures. None seem of special importance.

GREECE

THE WORK OF THE GREEK ARCHAEOLOGICAL SOCIETY.

—The *Πρακτικά* for 1902 (Athens, 1903), contains a record of the work of the Greek Archaeological Society during that year. The Secretary, P. KAVVADIAS, contributes a general report on the activity of the society (p. 9-36), and special reports of each piece of work are furnished by those in charge. It appears that work has been carried on in **Athens** at the Olympeum by G. NICOLAÏDES (p. 45), and at the Stoa of Attalus by D. K. MYLONAS (p. 46); in the old necropolis at **Eleusis** (p. 47), and also for a short time at **Aegina** (p. 48) by A. N. SKIAS; at **Thermus** (pp. 49-52), and **Chaeronea** (pp. 53-59; see *infra*) by G. SOTERIADES; at **Sesklo** in Thessaly (pp. 59-61), where a very early prehistoric settlement was discovered, by C. TSOUNTAS; on Euboea at **Chalcis**, **Eretria**, and near **Vathy** by G. A. PAPABASILEIOS (pp. 61-72); and on **Mt. Lycæus** and at **Cotilum** (pp. 72-75; see *infra*) by K. KOUROUNIOTES. The work in the Stadium at **Epidaureus** is described by P. KAVVADIAS (pp. 78-92).

GREEK SITES IN THE AEGEAN AND ASIA MINOR.—In *Nation*, May 5, 1904, H. N. F. describes the present condition of the excavations at a number of sites in the Aegean and Asia Minor. The account includes Delos, Melos, Thera, Samos, Crete, Ephesus, Miletus, the temple of Didymæan Apollo, and Pergamum. The results of the excavations have appeared already in this *Journal*.

ÆGINA.—**The German Excavations.**—In *W. klass. Phil.* 1904, coll. 589, 701, are reports of Furtwängler's excavations at the site of the temple of Aphrodite on Aegina. A mass of vases extending from prehistoric to Byzantine times has been found, among them few Mycenaean, but countless proto-Corinthian and Corinthian fragments. A sphinx, which was an Acroterion of the temple, seems to be in the style of Calamis. An inscription refers to Ἀφροδίτη ἐπὶ λιμένι. The temple seems to have been built about 460 B.C. A full report has appeared in the *Kölnische Zeitung*.

ÆTOLIA.—**Tumuli.**—In the autumn of 1903, G. SOTERIADES opened two funeral mounds in Aetolia, one near the ruins of Trichonium, the other in the plain east of Konopa-Arsinoë. The first was erected probably at

the end of the third or beginning of the second century B.C., apparently on a spot where earlier graves had been plundered. Several small objects were found in the upper earth, and an undisturbed grave with a golden crown, candelabrum, a silver table service, and other small objects. The other mound contained the grave of a man about forty years old, with a small gold crown, silver dishes, a clay amphora, and other vessels. There were traces also of the cremation of another body in the mound. (*Athen. Mitth.* XXVIII, 1903, pp. 475-476.)

AMYCLAE.—**Fragments of the Throne of Apollo.**—The excavations undertaken by Professor Furtwängler in Greece, at the expense of the Bassermann-Jordan Stiftung, have resulted in the discovery of several portions of the famous throne of Apollo at Amyclae, which is known to be the work of Bathycles. Unfortunately, the base is under the ancient church Hagia Kyriaki, and many important pieces of marble have been built into other churches; but as the Greek government has shown itself willing to assist the professor in every way, hopes are entertained that the work of reconstruction is merely a matter of time. The sculpture is of great beauty. (*Athen.* April 23, 1904.)

ARCADIA.—**Discoveries on Mt. Lycaeus.**—Under the direction of K. Kourouniotes excavations have been resumed at Lycosura, and the place of sacrifice is now cleared. The altar was a large structure reached by several steps, and carried a portico with Doric half-columns such as has been hitherto known on the great altars of Asia Minor. Behind the portico was a large room. On the summit of Lycaeus the altar of Zeus has been found to be a cone about 15 m. high. The greater part is the natural rock, but about the top is a layer about 3 m. deep, of dark earth mixed with bones. The smaller objects found here are not of great antiquity. The hippodrome has been found, and near by two stelae with lists of victors in the games. They are arranged according to the priests of Pan. Among the victors is a Lagus, son of Ptolemaeus. (H. S., *Athen Mitth.* XXVIII, 1903, pp. 473-474.) The excavations in the sanctuary of Pan are briefly reported in the *Πρακτικά*, 1902, by K. KOUROUNIOTES.

ATHENS.—**Meetings of the German Institute.**—At the open meetings of the German Institute in Athens during 1903 and 1904, the following papers have been presented: January 7, 1903: A. WILHELM, 'On Greek Inscriptions'; H. THIERSCH, 'Rock Tombs in Palestine.' January 21: W. DÖRPFELD, 'The Older Parthenon'; G. SOTERIADES, 'The Tombs at Chaeronea.' February 4: W. DÖRPFELD, 'The Erechtheum and the Old Temple of Athena'; H. VON PROTT, 'Banking in Antiquity.' February 18: W. KOLBE, 'The Demetrian War'; H. THIERSCH, 'The Pharos of Alexandria.' March 4: B. SCHRÖDER, 'New Inscriptions from Pergamum'; G. SOTERIADES, 'The Battle of Chaeronea and the Tomb of the Macedonians.' March 18: W. DÖRPFELD, 'Professor von Wilamowitz on Leucas-Ithaca'; E. PFUHL, 'A Necropolis on Thera.' December 9, Winkelmann's Day: W. DÖRPFELD, 'Report on the Work of the Institute during 1902-03'; P. KAVVADIAS, 'The Excavations at Samos.' December 23: W. DÖRPFELD, 'New Excavations at Pergamum'; A. WILHELM, 'Report on a Tour in Achaea.' January 6, 1904: W. DÖRPFELD, 'New Excavations at Leucas-Ithaca'; I. SVORONOS, 'An Unknown Numismatic Treaty between Ptolemy II and the Romans.' January 20: W. DÖRPFELD, 'The Theatre of Thera'; A.

WILHELM, 'A Revolution at Thasos'; H. SCHRADER, 'The Hermes of Alcamenes at Pergamum.' February 3, W. DÖRPFELD, 'The Eleusinium at Sparta, according to H. von Prott'; G. SOTERIADES, 'Graves in Aetolia.' February 17: W. DÖRPFELD, 'Cretan, Mycenaean, and Homeric Palaces'; H. SCHRADER, 'Sculptures from Laconia.' March 2: H. SCHRADER, 'On the Eleusinian Relief'; R. HEBERDEY, 'The Excavations at Ephesus.' March 16: W. DÖRPFELD, 'The Original Plan of the Erechtheum'; SP. LAMBROS, 'A Modern Greek Description of the Antiquities of Cyzicus.' March 30: R. HEBERDEY, 'An Ancient Greek Grave-monument from Lycia'; A. KERAMOPOULLOS, 'A Manumission Inscription from Amphissa.' (*Athen. Mitth.* XXVIII, 1903, p. 480; XXIX, 1904, p. 112.)

The British School.—On March 16, 1904, the first sod was turned for the new Penrose Library, which is to be added to the Students' Hostel of the British School at Athens. Addresses were delivered by Mr. Elliot, the new British Minister to Greece, Director R. C. Bosanquet, Professor Dörpfeld on behalf of the other foreign schools, and Mr. D. Bikelas for the Greek Archaeological Society. This society has offered to place a bust of Mr. Penrose in the new building. (*London Times*, March 29, 1904.)

The Repairs on the Erechtheum.—The work on the Erechtheum in 1902 under the architect Balanos began with the restoration of the North Porch and the western outer wall. For the porch the remains were sufficient to make possible, with the addition of but little new material, the complete reconstruction, including the coffered ceiling. The half-columns on the west wall have been replaced, and part of the architrave, while the wall between is to be rebuilt so far as the remains allow. The next care is to be the thorough repair of the Porch of the Maidens and the eastern entrance. The work thus far has thrown much light on the history of the temple. Two points are of special interest. (1) The ancient repairs were not confined to the west wall and the north door, but extended to the roof and architrave of the North Porch. This work seems to belong in early Roman times, (2) Over the opening in the floor of the North Porch was an opening in the ceiling and roof. Thus the mark of the trident of Poseidon was left in the open air. (W. DÖRPFELD, *Athen. Mitth.* XXVIII, 1903, pp. 465-469.)

An Honorary Decree.—In the British School at Athens is an inscription, originally placed on the Acropolis, but found on the road to Marathon. It is the last part of an honorary decree, crowning a board of eleven officials and appropriating one hundred drachmas for a sacrifice and votive offering. The inscription is edited with full commentary by M. N. Top in *Ann. Brit. S. Ath.* IX, 1903, pp. 154-175. It must belong about 303-302 B.C., soon after the introduction of the twelve tribes. Probably the board contained twelve members and the president was specially honored in the missing portion of the decree. In an appendix *C.I.A.* II, 991 is dated in 200 B.C., during the interval between Attalus' arrival off Hermione and his entry into Athens.

A Treasure List from the Acropolis.—In the south wall of the Byzantine doorway of the Parthenon was the stone bearing *C.I.A.* II, 2, 678 A, B. This has now been removed and the inscription on the reverse is published by E. VAN HILLE in 'Εφ. 'Αρχ. 1903, coll. 139-150 (pl.). It is broken at the top and upper right corner. It contains three columns of writing, with about 130 lines in a column, from the treasure list of the year 368-367 B.C., a year earlier than the list *C.I.A.* II, 2, 677.

CHAERONEA. — **The Burial Mound of the Macedonians.** — In *Athen. Mitth.* XXVIII, 1903, pp. 301–330 (pl.; 5 figs.) G. SOTERIADES describes his recent excavations at Chaeronea in search of the grave of the Macedonians who fell in 338 B.C. The first attempt was made at a mound near the western end of Mt. Acontium. This proved to contain chiefly prehistoric objects, with modern, Byzantine, and Roman remains in the upper portion, but nothing belonging to the period of the battle. The second mound is about $2\frac{1}{2}$ km. east of the first, near the Cephissus. It proved to be a monument of the fourth century, erected over a great funeral pile. The vases and the fragments of lance heads, swords, and knives prove that this must be the grave of the Macedonians. A full discussion of the various theories of the opposing armies in the battle leads to the conclusion that all have erred in placing the Greeks too near Chaeronea. The Macedonian right was near the bridge at Molos, their left on the Cephissus near the mound. The lion of the Thebans was not on the battle-field, but near the city on the road, where it could be easily seen. (See also *Id.*, Πρακτικά, 1902, pp. 53–59; A. S. COOLEY, *Rec. Past*, III, 1904, pp. 131–143; map; 6 figs.)

CHALCIS. — **Inscriptions and a Fort.** — In *Εφ. Ἀρχ.* 1903, coll. 115–134 (pl.), G. A. PAPABASILEIOS reports recent discoveries near Chalcis. On two curved stones forming part of a small exedra are inscribed four decrees, one of which was to be set up in the most conspicuous place in the agora. All are honorary, and the oldest seems to belong in the reign of Ptolemy VI, Physcon (181–146 B.C.). The last part of the article describes a fort near the river Lelantus, on a somewhat steep hill. A wall surrounds it on three sides, the north being inaccessible. On the east there were two walls forming an outer court. Within was a row of twenty rooms, arranged in blocks of five, for the garrison, and on the highest point were other small houses for the officers. In the course of the article the author disputes strongly Wilhelm's view (see *Am. J. Arch.* VII, 1903, p. 469) that the Chalcidian inscription published in *Εφ. Ἀρχ.* 1902, col. 29, is of Attic origin.

CORINTH. — **Head of a Youth** (Fig. 1). — On May 20, 1902, there was found in the orchestra of the theatre at Corinth a head of Parian marble, which had belonged to a life-size statue of a youth. It is not carefully finished, and the greater part of the nose is gone. A close analysis of the head shows that it serves as a link in connecting several heads, once assigned to Myron, though of late some have been attributed to Pythagoras. The closest analogy in shape is afforded by the Perinthus head at Dresden (Brunn-Bruckmann 542), but with this are joined the Ince-Blundell and Riccardi heads, as well as that of the Massimi Discobolus. All show the same marked contrast to the Polyclitan type in the regular, unbroken curve over the top of the skull from front to rear. The head also shows some very evident resemblances to the Idolino, which suggests the possibility that it may have belonged to a free reproduction of that bronze. (R. B. RICHARDSON, *Athen. Mitth.* XXVIII, 1903, pp. 451–461; pl.; 7 figs.)

The Isthmian Sanctuary. — Trial excavations by B. Staës at the Isthmian sanctuary confirm the conclusions reached by Monceaux, that the ancient remains have suffered unusually complete destruction. The whole area was filled with Byzantine houses and churches. (H. S., *Athen. Mitth.* XXVIII, 1903, pp. 472–473.)



FIGURE 1.—MARBLE HEAD FROM CORINTH. See p. 357.

COTILUM. — **Two Temples.** — Pausanias (VIII, 41, 6) mentions, near the temple of Apollo at Bassae, a spring on Mt. Cotilius and a temple of Aphrodite. In 1902 excavations were made at a hollow on the side of the mountain already indicated by Ross as the site of this temple. Two temples were found, each consisting of a *prodomos* and *naos*, but with no trace of columns. One was 9.25 m. $\times$ 5.74 m., the other 15.43 m. $\times$ 6.47 m. Many terra-cotta female busts, fragments of tiles, bronze mirrors, and other small objects were found, but little pottery and only one inscription which was more than the merest fragment. It was an Arcadian manumission on bronze and named Ἀπόλλων Βασσίτας, Πᾶν Σινόεις (a new epithet), and Ἄρτεμις Κοτίλειος καὶ Φορθασία. The omission of Aphrodite is strange, but still it is probable that the two goddesses were worshipped at this spot, and that the larger temple, which is alone visible from the spring mentioned by Pausanias, was dedicated to Aphrodite. The temples seem to have been visited during the fifth and fourth centuries; nothing found was later than the third, and they were probably abandoned about that time. (K. KOURONOTES, Ἐφ. Ἀρχ. 1903, coll. 151-188; 2 pls.; 10 figs.)

CRETE. — **CNOSSUS.** — **Excavations in 1904.** — No detailed account of this year's work at Cnossus has appeared, but the London *Times*, April 27 and May 31, 1904, publishes two letters from G. A. MACMILLAN, containing telegrams from A. H. EVANS. The first telegram is also reported by L. DYER in *Nation*, May 19, 1904. This relates to the discovery, on a headland north of Cnossus, of a great stone mausoleum, consisting of a square chamber with a lofty Cyclopean gable, but approached by an arched passage. The whole is much damaged, as it has been quarried into. A cist grave was found in one corner. Nearly all the metal objects had been removed in ancient times, but many scattered relics were left. The grave probably was built for one of the last Minoan kings, as the space left for his successors was never occupied. It possibly represents the traditional tomb of Idomeneus. The second telegram reports the discovery of a new dependency

of the palace, containing a rich deposit of inscribed tablets relating to chariots and arrows. Near by was found a hoard of bronze arrow-heads, with remains of wooden chests and official sealings.

CRETE. — GOURNIA. — Excavations in 1903. — The excavations by Miss Boyd at Gournia, in 1903, are described in a letter published in part in *Rec. Past*, III, 1904, pp. 92-94. The palace has been cleared, revealing an outer and inner court, a square hall with a recess in one corner and seats on three sides, and two stairways. A new quarter of the town was uncovered, containing small but well-built houses surrounded by paved streets. A shrine with idols, inscribed tablet, and a fine series of vases have been found. The University of Pennsylvania will receive a valuable set of vases and tools of the bronze age (duplicates). See also *University of Pennsylvania: Transactions of the Department of Archaeology*, vol. I, part I, pp. 7-44 (1904).

CRETE. — PALAEOCASTRO. — The Sanctuary of Dictæan Zeus. — The excavations of the British School of Athens at Palaecastro have led to the discovery, as reported by Director Bosanquet, of a Doric inscription, containing a ritual hymn to the infant Zeus. It seems to fix the location of the sanctuary of Dictæan Zeus at this point. A Minoan house has yielded two exquisite ivory statuettes of children. (G. A. MACMILLAN, *London Times*, May 31, 1904.)

CRETE. — PHAESTOS. — Discoveries at Haghia Triada. — In *W. klass. Phil.* 1904, coll. 219-221, is a somewhat detailed account of the Italian excavations at Haghia Triada in 1903. Under a Venetian cemetery on the slopes of the hill were found remains of two Mycenaean buildings, one of which proved to be a large palace. Servants' quarters, a kitchen, laundry, and a labyrinth of rooms were uncovered. In a sort of wooden veranda were found a few inscribed tablets and many seals. An interesting steatite vase is decorated with reliefs which seem to represent the departure of a military company. A street was found to lead to the necropolis, where were rock chambers containing stone sarcophagi, most of which were plain, but one was decorated with frescoes on stucco, which are fully described. They are valuable representations of offerings to the dead. The description varies in its details from that of G. Karo (see *Am. J. Arch.* VIII, 1904, p. 106). The houses yielded a mass of bronze vessels, vases, and lamps, while in the graves were many ornaments of gold, and precious stones.

DELOS. — Another Gift for Excavations. — According to *C. R. Acad. Insc.* 1903, p. 601, the Duc de Loubat has made a second gift of 50,000 francs toward the expenses of the French excavations on Delos.

EPIDAUROS. — The Stadium. — The excavations were continued through the entire year. In front of the stadium, under later walls, was found a stoa. In the sacred precinct many later walls were removed and older remains cleared. Near the cistern, between the precinct and the temple of Apollo on Cynortium, were found the foundations of a temple and a large building about 200 m. long. (*Athen. Mitth.* XXVIII, 1903, p. 473.) The result of the excavations at the Stadium is described in detail and fully illustrated with plans and photographs by P. ΚΑΥΒΑΔΙΑΣ in *Πρακτικά*, 1902, pp. 78-92 (11 pls.).

A Hoard of Coins. — In 1903 a small hoard of sixty-three silver coins was found in the stadium at Epidaurus. They are fully described and illustrated by A. D. ΚΕΡΑΜΟΦΥΛΛΟΣ in *Ἑφ. Ἀρχ.* 1903, coll. 97-116 (pl.;

fig.). The coins include three of Lysimachus, thirty-seven of Alexander the Great, one of Philip Arrhidaeus, four of Demetrius Poliorcetes, twelve of Athens, and four of Epidauros. The precise date of the deposit cannot be fixed, but it was certainly later than 294 B.C.

ITHACA. — **Excavations in 1904.** — In *W. klass. Phil.* 1904, coll. 589, 645, 701, are reports from various sources of Vollgraf's excavations for Goe-koop at Ithaca. At Ἐρμαῖος Λόφος were found a capital of Hellenistic work and some early graves. A long Mycenaean wall has been partly cleared, and near Fort Samikon a large building of undetermined age. At the "Grotto of the Nymphs" an inscription proves the worship of Athene, Rhea, and Hera. Pottery and coins show that sailors offered here through a long period. The presence of Mycenaean pottery leads to the hope of important discoveries in the Adyton.

LACONIA. — **Archaic Sculptures.** — In *Athen. Mitth.* XXVI, 1904, pp. 21-49 (2 pls.; 6 figs.), BRUNO SCHRÖDER publishes six archaic sculptures from Laconia, of which five were found by von Prott in 1902 and 1903. (1) A herm from Passava (Las), which differs from the ordinary form in having a tapering shaft, no projections at the shoulders, a somewhat convex front, and a ram's head. It probably represents Apollo Carneius. (Cf. Usener, *Rhein. Mus.* LIII, p. 360.) (2) A stele from Amyclae, now in Sparta. It bore two rows of reliefs and an inscription, but has been deliberately mutilated. The upper relief is interpreted as a sacrifice before the Amyclaeon Apollo, while the lower may represent a *calathiscus* dancer with spectators and musicians. The inscription indicates a dedication to Apollo. (3) A capital with relief from Slavochori, near Amyclae. It is of fine white marble, and carries on the front a somewhat mutilated relief, representing Heracles pursuing the Cerynaean hind, while on the left end it bears a volute resembling that of an Ionic column. The right end and top are missing. An examination of other Ionic capitals leads to the conclusion that this is an early Ionic capital of a pillar. The style of the relief is that of the Ionian school of about the middle of the sixth century. Perhaps it is from a leg of the Amyclaeon throne. (4) A very rude 'Hero' relief from Gerakion (Geronthrae), showing the hero seated and approached by two nude adorers. A snake drinks from the hero's bowl. (5) A fine 'Hero' relief from Charuda. The nude hero stands, with his shield on his arm and his helmet at his feet, before a serpent. The style is not that of Laconian art, but is Ionian, and somewhat later than the Heracles relief. (6) A stele from Gerakion, showing a seated youth supporting his head on his left hand. It is one of the first examples of this type, and belongs to the Ionian island school, which Furtwängler associates with Paros.

LAURIUM. — **A Statuette of Bendis.** — In *R. Arch.* II, 1903, pp. 381-386 (pl.; 2 figs.), F. CUMONT publishes a marble statuette, said to have been found at Laurium and now in the collection of R. Warocqué at Mariémont. It represents the goddess standing, clothed in a short tunic over which is a skin, while the large mantle falls at the back. On her head is a hood, resembling the Phrygian cap, but with a large cape at the back, and two lappets at the sides. The arms are broken, but probably held a lance and patera. At her left foot sits a small dog, an attribute only found in a terra-cotta statuette in the Louvre. The marble statuette is an Attic work

of the end of the fourth century, and was probably intended for some of the Thracian workmen in the Laurium mines.

LEUCAS. — **The Ancient Necropolis.** — In *Athen. Mitth.* XXVIII, 1903, pp. 479-480, W. DÖRPFELD corrects an inference of W. Kolbe (*Athen. Mitth.* XXVII, 1903, p. 368), as to the situation of the ancient necropolis of Leucas. The stones certainly came originally from the ancient necropolis and were found about 3 m. below the sea level in the channel between Leucas and the mainland. The place, however, was in the ancient harbor, and the stones seem to have formed part of the cargo of a ship which was bringing them across for use in the Venetian or Turkish fort. There is no reason for assuming such a sinking of the land as Kolbe and others have suggested.

MEGARA. — **Nisaea and Minoa.** — Since Lolling's article (*Athen. Mitth.* 1880, pp. 1 ff.), it has been generally believed that Minoa was situated on the western hill, while the eastern, with the chapel of St. George, was the site of Nisaea. This view has been disputed by Dörpfeld, and in January, 1904, trial excavations on the western hill were made by F. BÖLTE and G. WEICKER, whose report appears in *Athen. Mitth.* XXIX, 1904, pp. 79-100 (fig.). The first part is a discussion of the literary evidence, especially Thuc. III, 51, and IV, 66-74, showing that it is intelligible only if the names of the two heights are transposed. An examination of the eastern hill shows that it never was the seat of a town, like Nisaea, while the remains of ancient walls are thoroughly consistent with such a fortified post as was established on Minoa by the Athenians. Moreover, the nature of the ground shows that this eastern hill must have remained an island much longer than the western. The trial excavations on the western hill showed extensive remains of the ancient fortifications of the harbor and citadel. On the south and west no ancient remains were found, the ancient town having occupied the more gradual north and east slopes. That the hill was inhabited from the earliest times is shown by the mass of potsherds, but the stratification has been destroyed so that monochrome, Mycenaean, geometric, proto-Corinthian, black- and red-figured Attic, and Hellenistic fragments are found together on the surface. A deep excavation showed the same result. No Cretan monochrome, Kamares, Boeotian, Chalcidian, or eastern Greek ware was found. An inscription of the late fourth century contains a new artist's signature, Καλλικλῆς Εὐνίκου, perhaps the grandson of Callicles, the son of Theocosmus. The only sculpture found was the shaft of a draped female herm. It seems likely that systematic excavations on the site would yield valuable results. The article also describes some foundations of polygonal masonry on the Megarian peninsula, opposite Salamis, which seem to belong to a fort erected in the sixth century B.C.

OROPUS. — **The Amphiareum.** — The excavations at this site, directed by B. Leonardos, have been renewed. A large part of the κοῖλον of the theatre has been cleared and the drainage examined. Across the brook four buildings have been discovered, two with mosaic pavements. A gold chain with a horned lion's head at each end, and a *proxenos*-decree of the third century, have been found. (H. S., *Athen. Mitth.* XXVIII, 1903, p. 472.)

PHALERUM. — **Potamon, the Flute-player.** — In *Ἐφ. Ἀρχ.* 1903, coll. 133-138 (pl.), P. KASTRIOTES publishes a stele found in 1902 near New Phalerum. The relief represents a bearded seated man grasping the hand

of a standing youth. Each holds in the left hand a double flute. Below is this inscription in characters of the early fourth century:

Ἑλλὰς μὲν πρωτεύει τέχνης αὐλῶν ἀπένειμεν
Θηβαίῳ Πονάμῳνι τάφος δ' ὅδε δέξατο σῶμα
πατρός δὲ μνήμῃσιν Ὀλυμπίχῳν αὐξέει' ἔπαινος
οἷον ἐτέκνωσεν παῖδα σοφοῖς βάσανον
Πατρόκλεια Ποτάμωνος γυνή

The last line is a later addition. In line two should be read *Ποτάμῳνι*. It seems probable that Potamon was the son of the Olympichus mentioned by Pindar and said by the scholiast to have been a pupil of the poet. (Pind. *Pyth.* III, 159, and Schol.) The relief represents the meeting of father and son in the other world.

SUNIUM. — **The Ancient City.** — The excavations of Stais have been chiefly directed toward determining the plan of the ancient town. The city walls have been found in several places. In the small harbor was found a rock-hewn entrance to a ship's house. Several ruined houses were examined. In one was found a long clay basin and beside it a pillar in which had been set a small relief representing a woman leaning her right arm on a column, while she carried a child on her left. If a goddess is represented, this is a unique example of a cult in a private house. (H. S., *Athen. Mith.* XXVIII, 1903, pp. 471-472.)

THERA. — **The Theatre.** — The theatre was excavated in 1899 by Hiller von Gärtringen and is described by W. DÖRPFELD in *Athen. Mith.* XXIX, 1904, pp. 57-72 (pl.; 4 figs.). Three periods can be distinguished: (1) The earlier *scena*; (2) the present seats, entrances, and orchestra; (3) the later stage-buildings. Of the earlier *scena*, only scanty traces remain, but they suffice to show it was of the usual Hellenistic type, with three doors and a proscenium of columns and probably *pinakes*. It was earlier than the present seats and orchestra, which are differently oriented. The seats are enclosed by two parallel walls and have entrances only on the north side, where gates lead to the rear of the upper row, and also to the older orchestra. In Roman times a stage about 2 m. high, hence of the Asia Minor type, was built, covering part of the old orchestra. It seems dated by the presence of statues of Vespasian, Gaius, Germanicus, and Agrippina, the latter as Zeus Bolaeus and Hera Bolaea. It is probable that as early as the third century B.C. there was a theatre with a wooden proscenium, which was replaced by the stone structure. The new seats and entrances were probably erected in the time of Ptolemy Philometor, who is called *εὐεργέτης* of the city. The last alteration probably occurred in the reign of Caligula.

INSCRIPTIONS. — In *R. Ét. Gr.* XVII, 1904, pp. 1-4, A. E. CONTOLÉON publishes eleven inscriptions from Athens (five), Aegina, Laconia, Calamata, Kesserli, and Triccala in Thessaly, and Melos, and one from Tomi (Kustendjé). They are for the most part funerary. The Triccala fragment is on a votive relief, representing Artemis seated on a rock; before her are two women, an altar, and three men. The inscription from Laconia is a metrical epitaph of five lines, of which 1, 4, and 5 are hexameters, 2 and 3 pentameters. It seems to commemorate one who fell in the battle of Cnidos, 394 B.C.

ITALY

CUMAE. — **Early Greek Tombs.** — Three undisturbed graves dating from the early years of the Greek settlement at Cumae, one a cremated burial and the other two simple inhumations, together with a tholos tomb of the Oscan period, the beginning of the third century B.C., were discovered in 1902, lying close together just outside of the north wall of the ancient city. G. PELLEGRINI, in *Mon. Antichi*, XIII, 1903, coll. 201-294 (65 figs.), dates the early ones not far from 700 B.C. Their character and contents, with both pure Greek and Orientalizing tendencies, support the traditions of a double origin for the colony, from Chalcis in Euboea and Cyme in Aeolis. Native Italian influences also appear, and there are throughout striking analogies with important tombs at Praeneste, at Vetulonia, and elsewhere in Etruria and in Sicily, which throw light on the chronology of those lands as well. The founding of Cumae must be set in the second half of the eighth century, and the appearance of archaic Greek painted ware in Etruria not before 730-700 B.C., when the Greek colonies in Italy were established. The large domed tomb, built partly of stones from older structures, shows three periods of use and has receptacles for bones partitioned off around the sides and a sarcophagus with an Oscan inscription. The contents were plundered in ancient times. The contemporary use of cremation and inhumation, with the latter more common, is a frequent phenomenon all over the Greek world, since Homer. In this case, the ash-burial is accompanied by the more costly furnishings, having many articles of silver and some gold and electrum, as well as bronze, iron, and terra-cotta. The pottery, both native and imported, is of the period connecting geometric with proto-Corinthian.

ROME. — **Recent Discoveries in the Forum.** — The recent discoveries in the region of the Forum are discussed in some detail by T. ASHBY, JR., in *Cl. R.* XVIII, 1904, pp. 137-141, 328-331. They also form the subject of despatches or letters in the *London Times*, March 11, April 20, May 24, and July 4, 1904, and of short notes by F. BRUNSWICK in *Berl. Phil. W.* 1904, coll. 285, 700-701.

In the prehistoric necropolis, near the temple of Antoninus and Faustina, the number of tombs opened has increased to forty-two, but no new characteristics have been noticed. They contain sometimes cinerary urns, and sometimes coffins. The latter yield little but bronze and amber, while the *dolia* contain traces of gold and silver, bucchero vessels, and a few hut urns.

In the basilica of Constantine the ancient floor level has been exposed. The marble pavement has been badly damaged, but the tiles on which it was laid are easily traceable.

A paved road which seems to have formed the southeastern limit of the Forum during the late republic has been found southeast of the Arch of Augustus. It has been traced under the foundations of the temple of Divus Julius, and also between the temple of Castor and the Lacus Juturnae.

The chambers built against the Palatine, below the Clivus Victoriae, southwest of the temple of Augustus, seem to have been accessible only from above, by means of a stairway leading into a narrow passage back of the *tabernae* which surround the central area of the Horrea Germanicana. (?)

In the central area of the Forum has been found a large mass of concrete with three travertine blocks embedded in the top. It is identified by Boni

with the base of the equestrian statue of Domitian (*Stat. Silv.* I, 1, 29). An examination of this base revealed a travertine chamber carefully fitted in the concrete foundation, containing three bucchero and two red vases much like those of the tombs on the Sacra Via. It has been suggested that such vases were manufactured for ritual purposes even as late as imperial times, but it is perhaps more probable that they are the carefully reburied contents of a tomb, discovered during the laying of the pedestal. It is noteworthy that southwest of the base, about 20 feet below the imperial level, a well-preserved human skeleton was found lying at full length.

Near the north side of the Basilica Julia, and a little west of the base of the statue of Domitian, a trapezoidal platform has been found. It measures about 30 feet from north to south by 20 from east to west, and has been paved with travertine over an earlier foundation of tufa which has been cut away to receive this paving, except at one point, where a dodecagonal area, about 10 feet across, rises 4 or 5 inches above the travertine, and is enclosed by a balustrade of stone. This has been identified with the Lacus Curtius, and it is hoped that further investigations will reveal remains of the annual offerings.

In front of the temple of Divus Julius a concrete base has been found, which perhaps represents an Augustan restoration of the equestrian statue of Q. Marcius Tremulus, consul in 306 B.C.

Southwest of the temple a line of "pozzi rituali" runs along the side of the old road. Two of these pits have been found under the temple. Similar pits are on the southwest and northwest, but not the northeast, of the Republican Forum, and a triple row mark the boundary between the earlier Forum and the Comitium.

A Greek Gravestone. — The relief of an athlete and his attendant, discovered in Rome in 1902 by Professor Marucchi and now in the Vatican, is described by W. AMELUNG in *Jb. Arch.* I. XVIII, 1903, pp. 109-112 (pl.; 2 figs.). It is of Pentelic marble, an Attic work of the end of the archaic period, and related to the Nisyros stele and its companions. The artist shows the progress of his time somewhat unevenly in details, but he has given the head a singular refinement.

Unpublished Greek Sculptures. — In *R. Arch.* III, 1904, pp. 40-44 (pl.; 5 figs.), W. ALTMANN publishes two Greek sculptures in private possession in Rome. One is a head of Carrara marble, of which nose, mouth, and chin are modern. It shows a marked likeness to the Electra of Naples, but the hair is simpler, resembling that of the Apollo of Olympia, and shows well how the sculptor of the Electra has embellished his model, producing a pasticcio in keeping with the rest of the group. As the Orestes is the Peloponnesian statue copied by Stephanus, the Electra is also derived from a Peloponnesian original, of which this Roman head is a better copy. The other figure is a nude male torso of Greek marble, which reproduces a work of the period of transition, still preserving some traces of archaism.

Other Discoveries. — The work on the Ara Pacis has been hampered by technical difficulties and lack of funds. A new slab with a bearded figure representing the Senate joins a block discovered in 1859. The recent finds have settled the distribution of the various sculptures on the four sides.

Fragments of sculpture from an unknown imperial monument have been found in building the new Piazza dell' Esedra. On one is the temple of Quirinus, having in the pediment a group which seems to represent Romulus taking the auguries. In the centre are the birds, and at the ends Romulus and Remus with attendant divinities. (H. STUART JONES, *London Times*, May 24, 1904; E. PETERSEN, *Röm. Mitth.* XVIII, 1903, pp. 330-333.)

SYRACUSE. — **The Olympieum.** — The site of this temple, at the strategic point Polichne, on the Anapus, was newly explored by P. Orsi in 1893 and 1902. The worship of Zeus here as the patron of navigation is probably connected with the founding of the city itself. The older temple, of the seventh century and largely of wood, was at least partly rebuilt in stone about 600 B.C. The Sicilian custom, seen also in the Treasury of Gela at Olympia, of using terra-cotta for the decorated members, cornices, etc., is shown here by numerous remains of different epochs. All the forms of the temple are very archaic and the image was probably a wooden ξόανον. Fragments of inscriptions and of stone sculpture are extremely scanty, and even the plan of the temple, a peripteral hexastyle with 6×17 columns, and measuring 20.50×60 m., is to some extent conjectural. Two columns are still standing. (P. ORSI, *Mon. Antichi*, XIII, 1903, coll. 369-392; 3 pls.; 6 figs.)

FRANCE

NEW DIRECTORS AT THE LOUVRE AND AT ATHENS. —

On April 15, 1904, Mr. Kaempfen, Director of the National Museums since 1887, retired. His successor is Th. Homolle, since 1890 Director of the French School at Athens. The new director at Athens is Maurice Holleaux. (S. R., *R. Arch.* III, 1904, p. 411.)

AUTUN. — **A Statue of Greek Style.** — In *R. Arch.* III, 1904, p. 148 (fig.), F. DE MÉLY publishes without comment a flash-light photograph of a nude male statue of Greek style in the *Musée Lapidaire* at Autun.

AVEYRON. — **Graffiti of the Graufesenque.** — *R. Arch.* III, 1904, pp. 74-91 (7 figs.), contains an account by Abbé F. HERMET of *graffiti* on fragments of *terra-sigillata*, found in the plain of the Graufesenque, the ancient Condatomagus. Two were found in 1880, but the other five were discovered in 1901, 1902, and 1903. They are all mutilated, but seem to be lists, arranged in three columns, containing the names of potters, the names of vases, and the number of vases of the given kind made by the workman. The article gives facsimiles of the *graffiti*, and a discussion of a number of points of detail. A similar fragment has been found in the pottery at Montans (Tarn). The *graffiti* of Arezzo were not accessible to the author. *Ibid.*, pp. 200-204, J. DÉCHELETTE adds a discussion of various details and gives some corrected readings. No. 7 contained four columns, and the third indicated the capacity of the vases. Similar indications are found in some of the other inscriptions. The unit seems to have been the *congius* (3.28 litres). The quantity of vases made shows the importance of these potteries during the Flavian period. Mommo is credited with nine thousand vases, and his stamp is most frequent on the extant vases. The lists seem to have covered a somewhat long period, perhaps six months or a year.

BEAUVAIS. — **Roman Baths.** — In the course of repairs upon the church of St. Étienne, Beauvais, the remains of Roman baths have been found. The hypocaust was south of the church, and other rooms are

beneath that building. The discovery is of interest, as Roman remains are rare in this neighborhood. (HÉRON DE VILLEFOSSE, *B. Soc. Ant. Fr.* 1903, pp. 302-303.)

BOULOGNE-SUR-MER. — **A New Oculist's Seal.** — HÉRON DE VILLEFOSSE reports the discovery at Boulogne-sur-Mer by Dr. Sauvage of a new oculist's seal. It is of special interest, for it was found in a Frankish grave and bears an inscription in Greek, containing the names of three collyria in abbreviation. Three other seals with Greek inscriptions were already known. (*B. Soc. Ant. Fr.* 1903, pp. 299-300.)

FRÉJUS. — **Recent Discoveries.** — *B. Soc. Ant. Fr.* 1903, pp. 298-299, contains a note from HÉRON DE VILLEFOSSE on an inscription recently found at Fréjus by W. H. Bullock Hall. It marked the grave of C. Luceius, a veteran, and the second line reads **COHORT I CLASS.** This is interpreted as *cohorti(s) class(icae)*. R. MOWAT prefers to read *cohort(is) I class(icae)*, and interpret as a reference to the first cohort of *Leg. XVII Classica*. *Id. ibid.* 1904, pp. 107-109, reported on excavations by Mr. Hall in the amphitheatre. He has cleared the central box, and a staircase leading into the arena near the base of the *podium*. The facing of the latter has been partly cleared. Work is much hampered by the floods which cover the arena in winter.

LA MOTTE PASQUIER. — **A Statue of Sucellus.** — In *B. Soc. Ant. Fr.* 1903, pp. 222-225 (pl.), A. BLANCHET describes a statue, seated within an *aedicula*, and recognizable by the attributes as the divinity *Sucellus*. The monument was discovered in 1851 at La Motte Pasquier, but disappeared, and only the statue was on exhibition at Nevers. The remains of the monument have been recently found and the whole restored.

LANGRES. — **Gallo-Roman Inscriptions.** — *B. Soc. Ant. Fr.* 1902, pp. 215-219 (5 figs.), contains five Gallo-Roman sepulchral inscriptions found near Langres, and communicated by C. ROYER.

LEZOUX. — **A Laocoön Relief.** — In *R. Arch.* II, 1903, pp. 387-398 (pl.; 8 figs.), J. DÉCHELETTE discusses a relief on red ware from the Lezoux potteries, which is plainly a copy of the figure of the older son in the Laocoön group, modified only by introducing two serpents, whose heads appear on the right at the shoulder and on the left near the neck. Five vases or fragments with this figure are known, but as yet the rest of the group has not been found. To the same potteries belongs the figure of Heracles and the serpents, referred by Förster (*Jahrb. Arch. I.* 1894, p. 43) to Laocoön. The ovoid vases with decorations in applied relief are products of the Arvernian potteries at Lezoux and belong to the early third century of our era. The potters know only pagan subjects, without the least trace of Christian influence. Among the unpublished subjects is a Marsyas group, containing, besides the pendent Marsyas and the Seythian slave, two other figures.

MANDEURE. — **Gallo-Roman Bronzes.** — The Museum of Montbéliard has recently acquired an interesting series of Gallo-Roman objects, found in a field near Mandeure (*Epamanduodurum*). They include statuettes of Mercury (three), Mars, a draped woman, a child, and a man, an open hand, a dolphin, and some small pieces, fifteen in all. (A. Roux, *R. Arch.* III. 1904, pp. 193-199; 4 figs.)

MEAUX. — A Graffito. — In *R. Ét. Anc.* VI, 1904, pp. 149–152 (fig.), G. GASSIES publishes a *graffito* on the bottom of a red vase, which with some hesitation he reads *Callistra* (*tus* or *ta*) or *Callimitra para Valitus*, and interprets ‘C. prepare dinner for five.’ It would be the message of a master who intends to bring guests to dinner.

MIREBEAU-SUR-BÊZE. — A Roman Measure. — In *M. Soc. Ant. Fr.* LXII, pp. 185–204 (pl.), F. REY publishes, with a full discussion, a Roman measure found in 1884 at Mirebeau-sur-Bêze (Côte-d’Or). It is 0.294 m. long, made of three equal bronze bars, joined by hinges. One face is divided into sixteen sections by dots, which are doubled at each fourth division; another is divided into four parts by double dots; a third side contains twelve divisions; the fourth side is plain. Measurements have shown that, in the second century of our era, the Roman foot was reduced from 0.2957 m. to 0.2942 m., which is practically the length of this measure. The subdivisions are not very carefully made, and differ in length.

ORGON. — An Ancient Head. — At Orgon (Bouches-du-Rhône) there was found, in a deep pit within the ruins of a Gothic chapel, a stone head, which is published by M. CLERC in *R. Ét. Anc.* VI, 1904, pp. 145–148 (pl.). It had never formed part of a statue, and, while extremely rude in execution, is not primitive. It seems like the work of an unskilled Roman stonecutter, who had taken as his model an archaic Greek head. It was probably connected with a cult which was succeeded by the Christian chapel.

PARIS. — The “Société française de fouilles archéologiques.” — This is the name of an association recently organized in France, under the presidency of E. Babelon, with the object of furthering excavations, both public and private, primarily by instituting expositions of objects discovered in excavations and increasing therewith the collections in museums. (*Chron. d. Arts*, February 20, 1904, p. 61.) The Society, which has its seat at Paris, will publish a periodical called the *Bulletin de la Société française de fouilles archéologiques*, of which the first number has appeared, containing a *conférence* by Louis Watelin upon the excavations at Susa, an article on the foreign societies for the promotion of excavations, an account of the initial meetings of the Society, and a list of its members. The Central Committee of the Society has voted 6000 francs to A. Gayet for excavations at Antinoë in Egypt, 500 francs to M. Clerc for work at Marseilles, and 1000 francs to A. Engel for work in Spain. The annual dues are fixed at 20 francs, life memberships are 200 francs, and those who contribute 500 francs at one time are recorded as “Donateurs.” See also *R. Ét. Anc.* VI, 1904, p. 153.

Roman Remains. — Building operations in the Collège de France have brought to light remains of a Roman building, consisting of a circular hall, 18 m. in diameter, and smaller rooms. It resembles a bath, and may be connected with the neighboring *Thermae* of Julian. (*W. klass. Phil.* 1904, col. 390.)

REIMS. — Recent Discoveries. — *B. Soc. Ant. Fr.* 1903, pp. 230–234, contains a report, by Mr. DEMAISON, on several archaeological discoveries recently made at Reims. In excavating a wine cellar, at a depth of over 10 m., there was found a group of eight silver vessels of the Roman period. A Roman cemetery in 1878 yielded a vase with the inscription *vitula* in barbotine. It has since disappeared. In January, 1903, there was found a

milestone of Maximian (285-305 A.D.) which seems to have stood on the road from Reims to Bavai.

VÉNEJEAN. — **A Roman Necropolis.** — In *B. Soc. Ant. Fr.* 1903, pp. 262-269 (fig.), is a letter of F. MOULIN describing discoveries made in the neighborhood of Vénéjean (Drôme). Fragments of pottery and a few late bronze coins had been found previously, and recently a necropolis has been located and several urns unearthed. They contain, besides the ashes, glass vases, lachrymatories, lamps, and small objects. Of interest is a set of seven little vessels of tin. G. LAFAYE, in presenting the letter, suggested that these formed a child's toy service.

VIENNE. — **A Gallo-Roman Sarcophagus.** — In *R. Ét. Anc.* VI, 1904, pp. 63-66 (pl.), A. CHEREL publishes some fragments of a Gallo-Roman sarcophagus found at Vienne (Isère) in 1901. The relief represented a chariot race; and special interest attaches to two fragments, one apparently showing that it was a mule race, such as marked the Consualia at Rome, the other the torso of a charioteer wearing the same costume as the statue in the Vatican (Helbig, *Führer*², No. 341). The "corset" of straps or cords is not formed by the reins, as Helbig maintains, nor does it agree with the *fasciae* described by Gallienus.

WISSOUS. — **A Roman Reservoir.** — According to the *Voss. Zeit.*, there has been found at Wissous, south of Paris, the source of the Roman aqueduct which supplied the baths of Lutetia Parisiorum. It is a well-built structure surrounding a spring. (*W. klass. Phil.* 1904, coll. 84.)

BELGIUM

BRUSSELS. — **Sale of the Somzée Collection.** — The collection of antiquities gathered by Léon Somzée was sold at Brussels, May 24 and 25, 1904. It was the most important collection of Greek and Roman marbles offered for public sale since the Pourtales sale in 1865. The 'Antinous Sciarra' had been privately sold to Ny-Carlsberg for 250,000 francs. The best pieces were kept in Belgium by the efforts of Raoul Warocqué, of Mariémont, and the Museum of Brussels. The latter secured the archaic head of the Tyskiewicz collection, and the colossal bronze statue of Septimius Severus. The former bought a colossal statue of a helmeted ephebus — a Roman copy of a fine Greek original. Other particulars of the sale, and the prices paid for the more important pieces, are given by S. R. in *R. Arch.* III, 1904, p. 412.

GERMANY

HALLE. — **Forty-seventh Meeting of Philologists and Teachers.** — The following archaeological matters were discussed at this meeting, October 5-9, 1903: Restoration of the Pergamene Altar, with or without the colonnade at the top of the steps (PICK); The periods of habitation of the island of Thera, from the early Aegean, between the two great ancient volcanic eruptions, to the final inroad of Sarmatians in 862 A.D. (HILLER VON GAERTRINGEN); Refinements of the palace life at Cnossus and Phaestus, and the existence there of a goddess related to Aphrodite, who became the Ariadne of mythology (NOACK); The connection of Troy with Greek hero-tales, possibly from Lesbian bards taking over tales of an Ajax, king of Rhoeteum, who had overthrown Troy (BETHE); Methods of search for papyri at Oxyrhynchus (GRENFELL, of Oxford); The two

periods of Panathenaic amphoras, — Pisistratic, before 480 B.C., and that of the second Athenian island-league, after 400 B.C. (GRAEF); The group of gods on the frieze of the Cnidian treasury at Delphi, possibly the freeing of Hera from the magic throne by Hephaestus (SAUER); A collection of from eight hundred to nine hundred photographs of vases, as a nucleus for a *Corpus*, made by ZAHN, of Berlin, supported by the government of Baden; Archelaus's relief of the 'Apotheosis' of Homer, possibly a votive offering from a poet who had won a prize with a poem on that subject (SAUER). (B. GRAEF, *Arch. Anz.* 1903, pp. 200-203.)

MUSEUMS OF SOUTHWESTERN GERMANY. — Some antiquities in the museums at Colmar (Elsass) and at Freiburg and Donaueschingen (Baden) are described by H. HOFMANN in *Arch. Anz.* 1904, pp. 47-60 (13 figs.). At **Colmar** there are a part of the objects found by A. Salzmänn at Camirus, Rhodes, in 1858-65, a cabinet of objects from the Campana collection, and a few pieces of Roman sculpture. In the first group are specimens of Phoenician and Cyprian art, late Mycenaean (a wine strainer, among the earliest known examples of this vessel), Mycenaean-geometric transition, Samian, Rhodian, Corinthian (aryballus, hydria, etc.), Attic (eye-cylix, red-figured lecythus), and Hellenistic. The Campana cabinet contains a cylix, in the style of Phintias, with drinking and palaestra scenes; vases from Apulia and Etruria; and an unpublished 'Campana' relief, of a type belonging to the Augustan period. A head of Dionysus, of dark granite, of the 'Sardanapalus' type, a strongly individualized portrait-head from Mandeure, of the third century after Christ, with hair and mouth like Nero, an imperfect bronze statuette of Mercury, of a fine type, left unworked after the casting, and a good boar's head of bronze, are Roman. At **Freiburg** a rude bronze figure belonging to the group of geometric-period idols is remarkable because it represents the almost unexampled single-flute player. At **Donaueschingen** are three grave-reliefs from Asia Minor, which were brought from Smyrna in 1730, and have until recently been at Celles, Poitou. The inscriptions are published in *C.I.G.* 3217, 3271, 3371. The lettering on the stone of 'Ἀθήναιος Ἰκεσίον and his wife Νάννιον, who are represented in the hand-clasping attitude and with a maid-servant standing by, corresponds with the date, about 100 B.C., of Hicesius, founder of the school of Erasistrateans at Smyrna. The stone of 'Ἀμφίπολις — a young girl who stands holding a dove on her outstretched hand, and accompanied by her maid — is of about the same period and, curiously enough, is decorated with the same honorary wreaths. Πόπλιος Δίδιος Πολύβιος, who is accompanied by his wife and a little slave boy, warns off tomb violators, in the Lycian fashion, and designates the Boulé of Smyrna as recipient of the fine. The letters are of the time of Trajan.

BERLIN. — **Acquisitions of the Antiquarium since 1894.** — The first comprehensive report for ten years of the objects in metal acquired by the Antiquarium is published by E. PERNICE in *Arch. Anz.* 1904, pp. 17-48 (40 figs.). It includes chiefly single acquisitions, omitting the less important pieces and those special objects or collections from Leontini, Boscoreale, Hermopolis, Priene, and elsewhere, which have been prominently discussed in other places. Even so, the list numbers ninety-nine bronzes, forty-three pieces of gold and silver, and thirty-nine of lead. There are specimens of archaic and classic Greek art, Hellenistic, Etruscan, Roman, Pompeian,

Egyptian, Gallic, etc., which illustrate in the fullest way the life, art, and religion of the ancient world. The bronzes include dishes and vases of every kind, often exquisitely ornamented in relief, handles and other parts of objects, candelabra, mirrors, personal ornaments, a helmet, a pair of sandal soles, ornaments in relief and in the round from horse trappings and furniture, cymbals, statuettes. Among the figures are two archaic Discoboli from candelabra, a fifth-century Pan with pronounced animal characteristics, a very fine early fifth-century Diadumenus, a dancing satyr and a comic actor from Egypt, — both late Hellenistic work, — a good Hellenistic caricature of an Oriental crippled beggar, and some knife-handles in the form of Thracian gladiators. Many of the bronzes show traces of gold or silver plating. The patina of most pieces is preserved. In one, an Aphrodite from Thessaly, from which it has been removed by modern cleaning, there are details visible which suggest the question of an artificial ancient patina. There is a gold diadem, elaborately ornamented, from a grave at Menidi, other gold jewellery of the finest workmanship, silver rings, eardrops, armbands and dishes, lead weights from Athens, Rome, Alexandria, and many cities in Asia Minor.

EISENBERG. — **Roman Inscriptions.** — In *Berl. Phil. W.* 1904, coll. 476-479, C. MEHLIS publishes three Latin inscriptions and describes two other stones, one of which seems to be the lower part of a milestone. All were found in a Roman fort at Eisenberg on the Eis in the Palatinate. Two of the inscriptions were on altars dedicated by one M. Adiutorius Memor; one was to Mercury and Rosmerta, both of whom are represented in relief on the front. The third inscription is also on an altar, but the text is only partially legible. The name of the Roman town at this point is unknown.

ERLANGEN. — **The University Museum.** — A collection of antiques was started with the gift of a box of vase fragments from the Neue Pinaothek at Munich, containing Corinthian, Cyrenean, Italo-Ionic, Attic, and Etruscan ware, from which some dozen entire vases have been put together. A red-figured jug, possibly an Ionic original, has some peculiarities in the shoulder ornament. Two two-horse chariots — one with the front running up into a high palmette, the other having a high front made separate from the sides and representing in its lower part the head of a boar — are driving toward the centre, where stand two women, one with her arm around the neck of the other. This is, perhaps, the earliest example of this motive. Both chariots have a tongue-piece behind, to prevent their tipping back when detached from the horses. There are also a fine red-figured Attic jug of the Phidian epoch, some duplicates from the Schliemann collection at Berlin, the bronzes from a grave of the geometric period, a number of fifth-century and other terra-cottas, and other objects. (H. BULLE, *Arch. Anz.* 1904, pp. 60-62; 3 figs.)

KLEIN-KROTZENBURG. — **A Roman Bridge.** — The *Allg. Zeit.* reports that at Klein-Krotzenburg the remains of a Roman bridge across the Main have been found. A pier has been discovered on shore, and eight under water. (*W. klass. Phil.* 1904, coll. 84.)

REICHENHALL. — **A Prehistoric Meeting-place.** — In 1890 and the following years Dr. MAX VON CHLINGENSPERG AUF BERG excavated two prehistoric mounds near Reichenhall. The delayed publication of his results

is made in *Mitth. Anth. Ges.* XXXIV, 1904, pp. 53-70 (9 pls.; map). At Langenacker the mound showed, near the top, a deep layer of broken calcined bones of animals, — cattle, swine, sheep, goats, and horses. Below was a layer of ashes with uncalcined bones. In both, especially the upper layer, were masses of potsherds. It seems to have been a place of sacrifice and feasting for large gatherings over many years. The upper layer must have contained at least 270 cu. m. of bones. Below the ashes and a bed of clay was found a burial-place surrounded by a low wall of loose stones. Here also were evidences that the bodies had been burned elsewhere, and there were many remains of funeral feasts. Not far away, at Eisenbichl, was found a layer of ashes about 18 m. long, from 5 m. to 12 m. broad, and 0.30 m. to 0.56 m. deep, with a hearth in the centre, surrounded by large stones. This was, perhaps, used in connection with the gatherings at Langenacker. The neighborhood of the salt springs at Reichenhall probably led to the spot becoming a tribal centre. The pottery belonged to the bronze age.

SAALBURG. — A Baker's Shovel. — A baker's shovel (*pala*), such as is still in use for putting bread into the oven, was discovered at the bottom of a recently excavated Roman well in the Saalburg. Similar instruments are represented on Roman frescoes, but this is the first one that has been found. It is of beechwood, and is made in one piece. A silver coin of Antoninus Pius, a bronze coin of the Empress Faustina, and a well-preserved leather shoe were among the further contents of the well. (*Athen.* March 26, 1904.)

TRIER. — A Roman Mosaic. — In the Konstantinsplatz in Trier there has been found a large mosaic pavement, which rivals the Monnus mosaic. Its general arrangement is similar. An ornamental border enclosed three rectangular spaces. The central space contained an octagon surrounded by four hexagons, between which were small squares and pentagons. The octagon contained heads of Athena and Hermes and probably the figure of a Muse. The hexagons seem to have each contained two Muses. The squares contained youthful male figures, and the pentagons the winged heads of wind gods. Of the fields at the sides only one has been cleared. It contains six rectangles, each containing a standing male figure in Greek costume with individualized features, apparently portraits of philosophers or literary men. (*Allg. Zeit. in W. klass. Phil.* 1904, coll. 84-85.)

URSPRING AN DER LONE. — A Roman Fort. — *Voss. Zeit.* reports the excavation of the Roman fort at Urspring on the Lone by Fabricius and Jacoby. The large size of the enclosure indicates that a cohort was stationed at this point, which seems to have been fortified by Antoninus Pius and Marcus Aurelius. There are no traces of violent destruction, and it was probably abandoned. The buildings seem to have been of wood, contrary to the custom in other Roman forts. Besides the stone wall, there seems to have been an earth wall topped by a wooden palisade. (*W. klass. Phil.* 1904, coll. 645-646.)

WEISSENBURG. — A Roman Measure. — In the Roman fort of Biriciana, near Weissenburg, there has been found, according to the *National Zeitung*, a bronze measure, exactly one Roman foot in length. On three surfaces it is divided by points into twelve *pollices*, sixteen *digiti*, and four *palmi*. A hinge at the middle enabled it to be used also as a pair of compasses. (*W. klass. Phil.* 1904, coll. 197.)

AUSTRIA

ANTHROPOLOGICAL DISCOVERIES IN 1902.—*Mitth. Anth. Ges.* XXXIII, 1903, *Sitzb.*, pp. 59–84 (10 figs.), contains a detailed report of work in Austria during 1902. Most of the reports relate to minor excavations, accidental discoveries, or the acquisitions of the local museums. K. TOLDT, JR., reports (pp. 64–68) the excavation of a series of mound graves in **Mittelsteiermark** near Furth and Stainz. All proved to be of the Roman imperial period, and contained, with ashes, the fragments of characteristic native pottery. No *terra sigillata* was found. From **Trieste** C. DE MARCHESETTI reports the examination of the so-called *castellieri*, of which 461 are now known. He also opened 175 graves at St. Lucia, bringing the total number to 3955. He found chiefly small ornaments, especially *fibulae*. From the same centre L. K. MOSER reports the clearing of a small cave near **Nabresina**, finding remains from the palaeolithic and neolithic periods, and two early burials. The first inhabitants were hunters and fishers, using tools of stone, bone, and horn, but apparently no pottery, and not venturing to the sea. Fresh-water shell-fish and turtles were eaten, but no sea-shells were found. The use of pottery may have been learned from the lake-dwellers of Laibach or the Po Valley. The later dwellers had tamed sheep, goats, and cattle, and were acquainted with the horse. H. RICHLÝ reports the discoveries on the ancient roads between Bohemia and lower Austria. Near **Zinolten** was found a heavy stone hammer, which throws light on the course of the early line of communication into Bohemia. Near **Jaroslavic** were found a number of objects from the bronze age, which seem to have belonged to a travelling smith; they included twenty-five massive bronze rings, a bronze celt, pins, a rod, and a twisted gold wire. Near **Skalitz** mound graves of the bronze age, belonging apparently to both Hallstatt and La Tène periods, were opened. From **Bukowina** R. F. KAINDL reports opening twelve tumuli at Unter-Horodnik and eighteen at Prädit. All belonged to the stone age, and yielded only ashes and coarse, black pottery. No polished, but only chipped, flints were found.

AQUINCUM.—**Inscription.**—In *Jh. Oesterr. Arch. I.* VII, 1904, *Beiblatt*, coll. 11–14 (fig.), A. VON DOMASZEWSKI publishes a fragmentary Latin inscription from Aquincum, which is of importance as fixing the government of Iulius Bassus in Lower Pannonia in the year 156 A.D., and thus confirming the author's date for the fragment of Dio 71, 1, Boiss.

DALMATIA.—**Roman Settlements.**—Until recently only fifteen Roman settlements and a single road were certainly identified in Dalmatia. According to *Voss. Zeit.*, K. Patsch in a recent tour has found, in the region south of the Narenta alone, 120 Roman sites and a number of roads. It seems clear that the region was densely settled. Tumuli and forts of an earlier time were also studied, many inscriptions and coins found, and through the pottery important information as to early trade relations obtained. (*W. klass. Phil.* 1904, coll. 502–503.)

POLA.—**Recent Discoveries.**—In *Jh. Oesterr. Arch. I.* VII, 1904, *Beiblatt*, coll. 15–24 (5 figs.), A. GUIRS reports the recent discoveries at Pola. Three new cemeteries have been discovered. Two contained stone urns, cylindrical pots, and cubical ossuaries. Among small objects were a fine ivory knife and an ivory measure, divided on one side into eight *digiti*

and on the other into two *palmi*. The other necropolis apparently belongs to the later Istrian period, before Roman occupation. Among the smaller objects found are three bronze statuettes and a lamp cover. Six fragmentary Latin inscriptions and seven potters' stamps are also published.

RUSSIA

RECENT DISCOVERIES. — In *R. Arch.* III, 1904, pp. 1-18 (10 figs.). A. BOBRINSKY publishes notes on archaeological discoveries in Russia during the period 1900-03. In the most ancient tumuli of Southern Russia the skeletons, and especially the skulls, are often painted red. No satisfactory explanation of the presence of this color has been given. In the Caucasus there are many indications of intercourse with Chaldaea in the eighth and seventh centuries B.C. In the government of Kiew, Hvoika has found pottery analogous to the earliest Cypriote and pre-Aegean ware, as well as many owl-headed figures like those from Troy. The Greek colonies of Chersonesus, Olbia, and Panticapaeum remain the chief centres of interest, and are now being systematically excavated at government expense. Chersonesus furnishes a series of strata — Greek, Roman, and Byzantine. The present work is the excavation of the city wall. Near a gate was found a tomb containing rich gold ornaments of the fourth century B.C. in bronze vases, one of which was inscribed *ἄθλον ἐξ Ἀνακίων*. Olbia has hitherto been a field for treasure-hunters, and the government excavations begun in 1902 must occupy many years. The city covered a large space, and there is also a huge necropolis, with graves from the seventh century B.C. to the third of our era. Nothing later has been found on this site. Many small objects — jewellery, terra-cottas, and vases — have been found, and recently a fine mosaic pavement, carefully built walls, and a large funeral chamber have been uncovered. The Scythian, Sarmatian, and Slavic tombs (Kourganes) yield many treasures, and are the only source for the prehistoric period. It is noteworthy that in Russia the early ages are not in regular succession. In some places the iron age follows that of stone. The later tombs contain Byzantine, Gothic, and Sassanid objects, and in northern and central Russia are traces of the Norman invasion.

GREAT BRITAIN

ANNIVERSARY OF THE HELLENIC SOCIETY. — The twenty-fifth anniversary of the foundation of the Society for the Promotion of Hellenic Studies was celebrated at Burlington House on July 5, 1904. The president, Sir Richard Jebb, delivered an historical address, in which, after a tribute to Sir Charles Newton, Bishop Lightfoot, the first president, and Mr. A. S. Murray, he pointed out the value of the Hellenic Society in promoting a closer intimacy between the scholars at Oxford and Cambridge and those in charge of the British Museum, whose services in raising the conception of advanced study in England were especially emphasized. In closing he discussed the ritual hymn to Dictæan Zeus, just discovered at Palaeokastro, in Crete. Short addresses were made by Professor B. L. Gildersleeve, Mr. Gennadius, Professor J. W. White, who presented a Latin address from the Archaeological Institute of America, Professor Percy Gardner, who eulogized the influence of Sir Charles Newton, and Mr. Cecil H. Smith, the successor of Mr. Murray at the British Museum. A brief history

of the Society, prepared by the honorable secretary, G. A. Macmillan, was distributed at the meeting. The inaugural meeting was held June 16, 1879, when 112 members were enrolled, and the first number of the *J.H.S.* appeared in 1880. This publication has always been the first object of the Society, which has never undertaken excavations on its own account, but has preferred to aid the work of other institutions, and provide a medium for the prompt publication of results. It has thus helped the British Schools at Athens and Rome, the Egypt Exploration Fund in its work at Naukratis (1885), the Cyprus, Asia Minor, and Cretan Exploration Funds, as well as the undertakings of Messrs. Bent, Paton, Penrose, and Woodhouse. Its interests, however, are not exclusively archaeological, and it has also published facsimiles of the Codex Laurentianus of Sophocles (1885), and, in conjunction with the Archaeological Institute of America, of the Codex Venetus of Aristophanes (1903). The number of Foreign Honorary Members has been increased to forty, and fifteen new members have been elected. The subscribing members now number 853. (LOUIS DYER, *Nation*, July 21, 1904; *Athen.* July 9 and 16, 1904; *London Times*, July 6, 1904.)

ROMAN BRITAIN IN 1903.—In *Athen.* February 6, 1904, F. HAYFIELD describes the unusually numerous discoveries of Romano-British remains during 1903. Excavations were continued with special success at Silchester, Caerwent, and the two Walls. At **Silchester** the chief discovery was a fine suite of baths, which is in general a good example of an ordinary Roman bathing establishment, though it harmonizes in its formality with the ground plans of the Forum and of the whole town. (See also *London Times*, June 14, 1904.) At **Caerwent** more houses, a small, apsidal building, and the foundations of an amphitheatre have been found, as well as an important inscription (*Am. J. Arch.* VIII, 1904, p. 121). At **Brough**, in the fort *Anavio*, an inscription recorded the presence of the First Cohort of Aquitani, in the reign of Pius and governorship of Julius Verus. An inscription from the Tyne at Newcastle showed that reinforcements from Germany arrived under this governor, who was not previously known to have ruled Britain. The eastern termination of **Hadrian's Wall** was more closely fixed by the discovery of a new piece near Wallsend, and the probable line of the vallum was traced at Chesters. The **Wall of Pius** was examined by excavators at Rough Castle, near Falkirk, where a small fort built against the wall was excavated. A larger fort at Barr Hill, near Glasgow, has yielded valuable results. The ramparts were turf, the ditches double, except on the north, and the gates defended outside by special ditches. Inside were buildings of stone and wood. Nothing was found later than the reign of Pius. There are traces of an older, smaller fort here, which may be due to Agricola. Other minor discoveries are mentioned.

ARBOR LOW.—**Neolithic Remains.**—During 1901 and 1902 investigations were undertaken by the anthropological section of the British Association at the Stone Circle of Arbor Low, where a number of megaliths are enclosed by an independent vallum and fosse. In *Archaeologia*, LVIII, pp. 461-498 (7 pls.; 6 figs.), H.-ST. GEORGE GRAY gives a very detailed report of these excavations and their results. No metals were discovered, nor any pottery, that could be assigned to the date of construction. Six sections were cut through the fosse, two through the vallum, and four trial trenches in the interior. Nothing Roman was found, except three pot-

sherds near the surface. Flint scrapers, knives, and arrow-heads, one of which was barbed, were found. The evidence seems to point to a date in the late neolithic or early bronze age. A bronze age tumulus was later built on the southeast vallum. An accurate relief model has been made, which is fully described and illustrated in *Man*, October, 1903, p. 145.

CAERWENT. — **The Excavation of Venta Silurum.** — The report on excavations at Caerwent in 1902 by T. ASHBY, JR., A. E. HUDD, and A. J. MARTIN appears in *Archaeologia*, LVIII, pp. 391-406 (plate; 4 figs.). The work was confined to the southwest corner of the old city, where four houses (4, 5, 6, 9) were cleared. Their remains are fully described and illustrated. There were no important small objects discovered, except a hoard of seven or eight thousand coins, ranging in date from Gallienus to Honorius (253-423 A.D.). Nearly all are the so-called *minimi*, and they are mostly in poor condition.

ENFIELD. — **Roman Burials.** — In *Proc. Soc. Ant.* XIX, pp. 206-210 (2 figs.), R. A. SMITH reports the discovery at Enfield of a Roman burial, consisting of a leaden coffin, and near by in a small tomb two lead ossuaries containing burnt human bones. The coffin lid was decorated with corded patterns and scallop shells. The date of the interments is uncertain, but is almost certainly Roman, and probably not earlier than 250 A.D.

KIRKINTILLOCH. — **A Roman Camp.** — The discovery of Roman remains in an old camp near Kirkintilloch formed the subject of a lecture by Mr. GEORGE MACDONALD, delivered last week to the Glasgow Archaeological Society. There are, in fact, two camps, the smaller dating from the first century, and the larger from the second. The most interesting exhibit was, perhaps, the altar, all but intact, with an inscription indicating that the garrison was composed of a cohort from Lower Germany. Among the other discoveries were stonecutters' implements, arrow-heads, a bag of tools so corroded with rust that it was impossible to separate them, and a number of skeleton heads of animals, including the shorthorn Celtic ox, now extinct. Most of the articles were recovered from the well forty-three feet deep in the centre of the camp. (*Athen.* January 30, 1904.)

LEICESTERSHIRE. — **Roman Antiquities.** — In *Proc. Soc. Ant.* XIX, pp. 244-249, W. J. FREER reported on discoveries in Leicestershire. On the Rothley Temple Building Estate a furnace room, hypocaust, and adjacent walling of a Roman villa have been found. Further excavations are planned. In Leicester at three points Roman remains have been uncovered. These consist of fragments of walls and pavements, and many smaller objects, such as tiles, bricks, potsherds, and pins, with a few coins. The report gives the potters' marks on the *terra sigillata*.

LONDON. — **Acquisitions of the British Museum in 1902.** — *Egyptian and Assyrian antiquities*: I. Egyptian. From the predynastic period, 4000 B.C. or earlier, bowls of red and buff pottery, animal figures of slate, perhaps worn as amulets, and a hanging ostrich egg which suggests that the similar objects suspended in Christian churches in the land at the present day are relics of some very ancient religious idea; from the earliest dynasties, 4000-3800 B.C., a wooden seal-cylinder, stone vases, — one of red breccia without foot or handles and one of green feldspar with gold-plated handles; 3500 B.C. or earlier, a terra-cotta table of offerings having models of huts and a courtyard; a wooden model of a boat, about 2300 B.C.; neck-

laces of semi-precious stones and porcelain, 2100 B.C.; stone statues, stelae, and vases of various dates; a bronze axe-head with the picture of a funeral boat, a painted inner coffin with a sphinx representing a deceased king, 1500 B.C.; leather funeral-sandals of a king, 1450 B.C.; an unusually fine Apis-bull of bronze inlaid with silver and other bronze animals and statuettes of all kinds; rings and scarabs of gold and precious stones, 2000-200 B.C.; single objects from the Roman and Coptic periods; among the numerous gifts are the contents of a tomb of the twelfth dynasty. II. Assyrian, chiefly record tablets. Agricultural and commercial documents in the Sumerian language, 2500-2300 B.C., second dynasty of Ur; a series of contracts and one historical cylinder recording deeds of a king, of the first Babylonian dynasty, 2300-2050 B.C.; contract tablets from the period of the Persian kings, 530-485 B.C.; a circular tablet dedicated to the god of Lagash and a bronze figure of a king, c. 2500 B.C.; a tablet in an early form of cuneiform signs, describing the building of a house and proving the very early worship of Marduk at Ashur — the only known inscription of the reign of Ashurbanipal, 1400 B.C.; a bronze bull-ornament from a throne, 750 B.C., found at Van; inscribed fragments from Kuyunjik. (E. A. WALLIS BUDGE. *Arch. Anz.* 1903, pp. 206-209.)

Greek and Roman antiquities: A gold bracelet of Mycenaean type; a silver cup from Syria, with repoussé design of a Roman legend, and a silver vase from Egypt, Alexandrine work of second or third century B.C.; twelve engraved gems, one of period of transition from Mycenaean art, one of Greek fifth century work, and others of Roman, Syrian, and Phoenician origin, a number being found in Cyprus; bronzes (ten numbers), a mirror, river-god, votive objects, and some plates in relief, of the seventh or sixth century B.C., originally used to ornament a wooden chest like that of Cypselus, from Eleutheræ; of marble, an inscription of 28 B.C. and the head of a vestal from Capua, and a portrait-bust resembling Augustus from Cyprus; terra-cotta statuette of Eros from Smyrna, and a sixth-century painted sarcophagus from Clazomenae; six pottery vases, an archaic inscribed red-figured alabastron supposedly from Attica; a black-figured scyphus with Heracles scenes from Boeotia; three Megarian bowls and a vase of Samian ware with festoons of ivy in relief. By gift: an inscribed tablet, *C.I.G.* 3376; a Greek inscription of a corporation of weavers, 109 A.D., and two painted wooden panels, 'Aphrodite' and 'Abundance,' fourth century of our era, from the Fayum; lead weights from Spain; piece of an Attic stele (*J.H.S.* XXII, pl. 1; *Am. J. Arch.* VI, 1902, p. 466); red-figured scyphus with cottabus scene and Atalanta; bronze strigil from Hungary. (A. S. MURRAY, *Arch. Anz.* 1903, pp. 209-210.)

British, mediaeval, and ethnographic antiquities: Three series of Drift-type flint implements, from Wilts, including some unusual specimens; a palaeolithic flint implement from a beach in Hants; neolithic objects from Wiltshire Downs, including some small pottery and bronze daggers; another such collection from North Ireland; stone axe-heads; jet objects from barrows; bronze objects from graves in Herefordshire; parts of bronze weapons from various places; a late Celtic bridle-bit, much worn, from Ireland; a series of water-worn quartzite implements from Madras; implement of Drift-type, from the Transvaal; stone mullers from the ancient gold mines at Erythra in Abyssinia; stone implements from Egypt and

Cyprus; a bronze ornament of La Tène period from Bohemia; objects from a Romano-British settlement in Wiltshire; others showing Celtic influence, from ancient Vertera, Brough, Westmoreland; remains from a Jutish cemetery in Hants; a writing tablet of whale's bone, of the late Saxon period, from Suffolk; an Anglo-Saxon iron sword from a grave in Bucks; the contents of Frankish graves along the Rhine, jewelled ornaments, etc.; brooches, an ecclesiastical belt, and silver reliquary crucifix, from Ireland. (C. H. READ, *Arch. Anz.* 1903, pp. 210-211.)

Appointment at the British Museum. — According to *Athen.* June 4, 1904, Mr. Cecil H. Smith has been appointed to succeed the late Dr. A. S. Murray as Keeper of the Department of Greek and Roman Antiquities in the British Museum.

Exhibitions of Egyptian Antiquities. — In *Athen.* June 25 and July 9, 1904, appears a somewhat detailed account of the exhibition at University College of Egyptian antiquities discovered by the Egypt Exploration Fund and Egyptian Research Account at Deir-el-Bahari, Gurob, and Ahnas, and at the Society of Antiquaries of the objects found by Mr. Garstang at Beni-Hassan and Negadah.

A Statuette of Jupiter Heliopolitanus. — As the fourth instalment of his 'Syriaca' (see *Am. J. Arch.* VII, 1903, p. 370), P. PERDRIZET publishes in *R. Arch.* II, 1903, pp. 399-401 (2 figs.), a bronze statuette of Jupiter Heliopolitanus, now in the British Museum (*Catalogue of Bronzes*, No. 1010, pl. 26, as 'Diana of Ephesus'), and a gem in the museum at Constantinople. The statuette wears the small Egyptian beard, and there is a large lotus on the front of the calathus. These facts speak in favor of the Egyptian origin of this god, which is asserted by Macrobius, but denied by Dussaud (*R. Arch.* I, 1903, pp. 357-359; cf. *Am. J. Arch.* VII, 1903, p. 457).

MARKET OVERTON. — A Roman Settlement. — The first important discoveries at this point in Rutland were made in 1863, and since 1900 more systematic explorations have brought to light a great deal of pottery, both local and imported, fibulae, knives, pins, and coins, including a Carthaginian piece of the early second century B.C. (R. HAINES, *Proc. Soc. Ant.* XIX, pp. 192-194.)

NEWCASTLE. — A Roman Altar. — At Newcastle, where the *Pons Aelius* crossed the Tyne, has been found an altar with the inscription *Oceano, leg(is) VI Vi(ctris), p(ia), f(elix)*. This must have corresponded to a similar altar, dedicated by the same legion to Neptune, and discovered some years ago. Both were probably set up when the legion landed in Britain in 122 A.D., an event commemorated on gold and silver coins of Hadrian. It is the first dedication to Oceanus. (R. MOWAT, *B. Soc. Ant. Fr.* 1903, pp. 299-301. Cf. *Athen.* February 6, 1904.)

OXFORD. — Acquisitions of the Ashmolean Museum in 1903. — The Museum has received from Abydos figurines in ivory and in bronze, resembling the marble figures of Amorgos, specimens of pottery, and a bronze ostrich feather covered with gold. From Beni-Hassan comes the model of a boat with six oars. The crew are hoisting the sails, the owner plays draughts at the stern, and an armed guard is at the bow. There are also noted late Mycenaean vases from Rhodes, and geometric fibulae from Thebes. The most important addition is a bronze vase from Olympia, with designs in *repoussé*; an inner zone contains five lions, an outer a lion-hunt.

with men in chariots, on horseback, and on foot. While showing marked Oriental influence, the vase is undoubtedly of Greek manufacture. Of the classic period are *fibulae* from Thebes, lead votive figures from Corinth, and a Megarian bowl with the Ransom of Hector, Priam, and Penthesilea, and the combat of Achilles and Penthesilea. From Naucratis has come a rich collection of fragments of vases and terra-cottas. The Museum has also received from the expedition of Dr. Stein in eastern Turkestan a series of objects from the Buddhist monasteries near Khotan, showing the influence of Greek art. (S.R., *R. Arch.* III, 1904, pp. 281-282.)

SILCHESTER. — **Excavations in 1902.** — The thirteenth successive season of excavation at Silchester has brought to light the remains of six small but interesting houses, and five other buildings, two of which are of a new type. One was a long, narrow structure (58 feet $\times$ 6 feet), with an open arcade of six bays on the east, the other was a semicircular wall of rubble, about 15 feet in internal diameter, and seems to have formed a sort of alcove. The work covered a small and rather irregular tract, so that only parts of five *insulae* could be cleared. The report by W. H. ST. JOHN HOPE contains also a note by E. T. NEWTON on the bones found in the wells and pits, and one by CLEMENT REID on the botanical remains. (*Archaeologia*, LVIII, pp. 412-428; 5 pls.; fig.)

SOUTH COLLINGHAM. — **A Roman Helmet.** — *Archaeologia*, LVIII, p. 573 (pl.), contains a very brief description of the cheek-piece of a Roman helmet, bearing in relief the figure of a woman standing by a horse. Her left hand holds the bridle, while her right seems to grasp a rope. The helmet was found in the Roman fort Crocolana, near South Collingham, Notts.

TAPLOW. — **A Bronze Spear-head.** — In a creek near Taplow has been found a bronze spear-head, with a blade $15\frac{1}{4}$ inches long, of unusual shape. On each face of the wings are two gold studs, ornamental survivals of a wooden handle, for the blade has the shape of the so-called rapiers. That this is a spear-head is proved by the socket containing remains of the wooden shaft. (C. H. READ, *Proc. Soc. Ant.* XIX, pp. 287-289; fig.)

TOWCHESTER. — **A Roman Head.** — A very rudely carved female head has been found at Towchester. It rises abruptly without neck from a block $4\frac{1}{2}$ inches deep, with a dowel hole in front and on the left side. The back and sides of the head have been roughly dressed away as if to fit the head into a recess. The total height is $22\frac{1}{2}$ inches. (T. G. F. HESKETH, *Proc. Soc. Ant.* XIX, p. 287; fig.)

AFRICA

BISICA. — **A New Inscription.** — In *Berl. phil. W.* 1904, col. 669, F. HAUG calls attention to an important inscription found about 8 km. from Bijga (Bisica) in Tunis. It is a dedication to the three emperors Valentinian, Valens, and Gratian, but its importance is in giving the name of the place where it was found, *castellum Biracsaccarensium*. Gauckler considers it an old Carthaginian settlement, afterward superseded by the more important Roman Bisica.

CARTHAGE. — **Discovery of a Sarcophagus.** — A letter from Père Delattre of December 6, 1903, announces the discovery, 13 m. below the surface, of a large sarcophagus of white marble. The body had rested on a

bed of sand. At the right side was a purse containing seven coins. Sifting the sand brought to light a gold ring. (*C. R. Acad. Insc.* 1903, p. 635.)

Punic Jewellery.—In *B. Ant. Soc. Fr.* 1902, pp. 271–277 (pl.), P. GAUCKLER describes a characteristic series of rings, seals, earrings, and amulets, selected from objects found in the Punic cemetery at Bordj-Djedid. The earlier seals show a decided Egyptian style, which during the fifth century yields to the Hellenic influence, which predominates in the fourth. The general execution of these rings and seals is coarse and gives a rather poor opinion of the taste of the Phoenicians in Africa.

Minor Discoveries.—A curious stele has been found in a Punic tomb of the sixth or fifth century. On it is carved the ‘Punic triad’; three unequal cippi on an altar, surrounded by divine symbols. The base bears a Punic inscription. Gauckler has found a deposit of projectiles of various sizes, some of which are marked with Phoenician characters. (*C. R. Acad. Insc.* 1904, p. 20.)

CHERCHEL.—**Roman Sculptures.**—In *B. Soc. Ant. Fr.* 1902, pp. 328–330, P. MONCEAUX describes some sculptures recently discovered near Cherchel. One is a male bearded head of strikingly individual type. The care with which beard and hair are dressed suggests that it may represent a native chief. The other monuments are Christian sarcophagi; one, with a relief of the Good Shepherd, bears the inscription, *C. I. L.* VIII, 9592. The other has on one side the inscription (*i*)*n Domino m(ortuus)*, and on the other an anchor, the sure sign of a Christian monument before Constantine. Mr. Michon suggests that the head is rather an archaistic Dionysus.

KHAMISSA.—**A Latin Inscription.**—At Khamissa in 1902 was found a Latin inscription on the pedestal to which in the new forum a statue of Trajan had been transferred from the old and ruined forum. This was done in the proconsulate of Clodius Hermogenianus, mentioned in another metrical inscription as builder of the citadel. The date is probably 361–362 A.D. The pedestal bore on its back a dedication to Hercules. (*R. CAGNAT, B. Soc. Ant. Fr.* 1903, pp. 248–251.)

MAROC.—**Roman Coins.**—In 1902 there was found in a Roman fort at Maroc in the southern part of Mauretania Tingitana a hoard of Roman coins. They are in part bronzes of the early empire of no special interest, and in part bronzes coined at Rome, Lyons, or Trèves between 253 and 322 A.D., which could have served as pay for the soldiers during the last years of Roman occupation. They are carefully catalogued and described by J. MAURICE in *B. Soc. Ant. Fr.* 1902, pp. 261–267.

MUNCHAR.—**A Dedication.**—In *B. Soc. Ant. Fr.* 1903, pp. 344–346, P. GAUCKLER publishes a Latin inscription from Munchar. It is a dedication for the welfare of the emperors M. Aurelius and L. Verus (161–169 A.D.) erected by a certain Agrius Samsera, who had given to the city four statues *Memoriae Temporum*. There was a temple of *Memoria* at Carthage, which was destroyed by the Vandals.

SOUSSE.—**A Sepulchral Inscription.**—In *B. Soc. Ant. Fr.* 1902, pp. 345–347, R. CAGNAT publishes a curious sepulchral inscription recently found at Hadrumetum (Sousse). It reads *D(iis) M(anibus) S(acrum) | Utnerika (?) vixit | anos q XXII oc nepotes fecerunt*. The name may be *Utnerika*, as the second letter has the top of a T and the bottom of an L. The character before XX seems to be the Greek *koppa*, and the || may be

an error for H. If 9 is used as a numeral, the age of the deceased would be 110 or 112 years. The back of the slab, which was concealed, has engraved upon it the figure of a race horse decked with all the adornments of the circus.

Terra-cottas from the Necropolis.—In *M. Soc. Ant. Fr.* LXI, 1900, pp. 230-242 (3 pls.; fig.), Dr. CARTON describes a collection of terra-cotta statuettes, lamps, and three fragmentary inscriptions found in the necropolis of Hadrumetum by a French officer. Of the thirteen statuettes ten represent Venus; the others are an old woman standing beside a large amphora, and holding an oenochoe in her left hand, a young woman carrying a child on her back, and Attis seated, playing the lyre.

The Site of Gurza.—In tracing the ancient road from Carthage to Hadrumetum, Dr. Carton has found the remains of an important city about 7 km. from Sousse. The ruins are partially concealed in gardens, and where exposed have been almost wholly destroyed. He identifies the site with the city of Gurza, which has hitherto been placed at Kala-Kebira. The modern successor of this town is Akonda. Along the road are numerous ancient remains, which are being rapidly destroyed for modern buildings. (CAGNAT, *C. R. Acad. Insc.* 1904, pp. 56-59.)

TENIET-EL-HAAD.—**Four Inscriptions.**—In the *C. R. Acad. d'Hippone*, 1902, pp. xvi-xx, are published four inscriptions from the neighborhood of Teniet-el-Haad. Two are mortuary, one in honor of Septimius Severus and Geta, and a fourth the dedication of an *hospitium* in honor of a deacon Safidus Faustinus, by his son Nabdur.

TUNIS.—**A Dolmen near La Calle.**—In *B. Acad. d'Hippone*, XXX, pp. 145-147, Dr. CARTON describes a dolmen on the Tunisian frontier. It is on a little tumulus, surrounded by a circle of large stones. The tomb opened toward the east. Noteworthy is the presence outside of the original blocks, supporting the table, of a series of cut Roman stones, evidently brought from ruins near at hand, and showing that the monument had a funereal or sacred importance to the natives. On the top of the table is a regular circular depression, evidently the work of man. The monument is one of a series which connect the groups of Dougga with those of eastern Algeria.

UTICA.—**Discoveries in 1902.**—Recent works undertaken near Utica have brought to light sculptures and inscriptions, which are described by P. GAUCKLER in *B. Soc. Ant. Fr.* 1902, pp. 237-244 (pl.). Of the sculptures the best is a colossal head of Heracles, crowned with vine branches, which can be compared with other heads found at Gigthi and Thysdrus. Other pieces are two masks of Bacchants, evidently copies of a Hellenistic work, a curious female herm, perhaps a personification of the city of Utica, and a little marble statuette. Of the eleven inscriptions, ten are sepulchral. The eleventh is an interesting, though fragmentary, dedication to Ceres, on a large slab bearing in relief a sow prepared for sacrifice. The tombs from which most of the inscriptions come have yielded the usual lamps, figurines, and small objects of the first two centuries of our era.

AMERICA

BOSTON.—**Acquisitions of the Museum of Fine Arts.**—The following summary is taken from the reports of Edward Robinson, Curator of Classical Antiquities, and of Albert M. Lythgoe, Curator of the Egyptian

Department, published in the *Annual Report* for 1903 (Cambridge, The University Press, 1904).

The important event of the year has been the receipt of the collection of Greek and Roman sculptures, vases, and smaller antiquities given by Mr. Francis Bartlett,—the largest and most valuable gift of works of art which the Museum has yet received. Mr. Bartlett gave the money to provide this collection four years ago. It consists of 20 marbles, 66 vases, 60 fragments of vases, 39 terra-cottas, 20 bronzes, 62 coins, 13 gems, 8 objects of gold and silver, 2 miscellaneous,—a total of 290 items.

MARBLES.—1. *Archaic Grave Stele*, with an acroterion of fine design. Published in the *Athen. Mitth.* 1895, p. 3. 2. *Fragment*. The right arm and hand of an archaic figure, extended, and holding a cantharos. Of life size, and undraped. 3. *Head of Diomedes*, in the so-called "Style of Cre-silas." This head is one of the best examples of the type which is most familiar through the statue of Diomedes in Munich. Published by Brunn-Bruckmann, *Denkmäler*, No. 543. 4. *Head of a Youth*, of the same style as the preceding, formerly in the collection of Dr. Philip Nelson at Liverpool. Published by E. A. Gardner in the *J.H.S.* 1898, p. 141, pl. xi, and by Brunn-Bruckmann, *Denkmäler*, No. 544. 5. *Fragment of a Mounted Amazon*. Of excellent Greek workmanship, dating from the late fifth or early fourth century B.C., and probably Attic. The fragment consists of the body of the horse and the legs of the rider, both of the latter being broken off below the knees. In type, costume, and action it resembles the well-known fragment from Epidaurus, though with certain differences. It is somewhat larger; the horse is of a rounder, stockier build; and the remains of an arm and hand, clutching a piece of drapery, on the left side of the horse's belly, show that there was a fallen warrior here, whom the Amazon was probably represented as slaying. Her action was therefore directed toward the left, while that of the figure from Epidaurus is toward the right, and consequently one cannot have been copied from the other. 6. *Small Figure of a Weeping Siren*. Greek, of the early part of the fourth century B.C., and evidently from an Attic grave. A precisely similar figure in the Louvre is figured by Reinach, *Répertoire*, II, 702, 2. 7. *Head of Aphrodite*, of exceptionally beautiful type and execution. An original Attic work of the school of Praxiteles, dating from the second half of the fourth century B.C. 8. *Fragment of a Statue*. The legs of a seated female figure, draped in a large himation. Of life size and fine execution. The outlines of broad bands are lightly chiselled on the drapery, some running horizontally, others vertically. Greek, probably fourth century B.C. 9. *Small Figure of a Goddess riding on a Swan*. The goddess is of large, heroic mould, and wears an Ionic chiton and a large himation, the latter carried over her head like a veil. It was apparently used as a fountain ornament, as a hole for a pipe runs up from the bottom through the swan's neck. Greek—third century B.C.? Figured by Reinach, *Répertoire*, II, 687, 1. 10. *Head of Zeus Ammon*, slightly less than life size. Type mild, with slightly wavy hair and beard. 11. *Fragmentary Statue of a Seated Woman*. Of life size. She wears an himation and Ionic chiton, and sits with the right arm extended in front of her, the right foot resting upon a footstool. Found at Vasciano, in Umbria, and published by L. Pasqui in the *Not. Scavi*, 1900, p. 253. The execution, which is elaborate, is charac-

teristic of the best work of the time of Augustus, but the type probably dates from the fourth century B.C. 12. *Head of a Young Athlete*, of curious style, possibly a Roman copy of a bronze work of the first half of the fifth century B.C. A fragment, broken off at the turn of the neck into the shoulder. 13. *Portrait Head of a Roman Matron* (fragment of a bust or statue, broken off at the base of the neck). A middle-aged woman, with round, full, and rather fine features, the subject unidentified. Coarse-grained marble and good execution, of the first or early part of the second century after Christ. 14-16. *Three Small Hellenistic Heads*, two of infant satyrs, wreathed with ivy; the third, a Hermaphrodite of familiar type. 17. *Statuette of Aphrodite*, standing upon the right leg, with the left knee slightly bent. She is drawing a mantle over her shoulders from behind. At her left is a dolphin. 18, 19. *Two Fragments of a Large Roman Frieze or Panel*. These must be the two ends of a composition, as a border runs around the left end of one and the right end of the other. 20. *Cock*, bending forward, with head down. Of life size.

BRONZES. — (a) STATUETTES. 1. Very early 'Apollo,' from Boeotia; formerly in the Tyszkiewicz Collection. Published by Fröhner, *Mon. Mem. Acad. Insc.* II, pp. 137-143, pl. xv; and *Collection Tyszkiewicz*, pl. xlv (Sale Catalogue, pl. xiii, No. 133). 2. *Archaic Youth* of the 'Apollo' type, from Olympia. Published by Furtwängler, *Neue Denkmäler*, I, No. 3 (*Sitzb. der bayr. Akad.* 1897, Bd. II, pp. 118-122, pl. ii). 3. *Archaic Horseman*, from Mantinea. A nude youth riding with the bridle in his left hand, and the right, closed, on his thigh. 4. *Standing Woman* of late archaic type, wearing a Doric chiton with *diploidion*, her right hand raised, and the left extended horizontally. The head is modern. Figured in Reinach, *Répertoire*, II, 642, 8 and 643, 7. 5. *Left Foot* of a statuette, from Lycosura. Delicately modelled. 6. *Dionysus*, from Lower Egypt. Youthful type, nude, except for his *endromides*. Briefly described and figured in *Arch. Anz.* 1890, p. 157, No. 9 (Schreiber). 7. *Graeco-Roman Hermes*. Nude, standing on right foot. 8. *Athena*. Figured in Reinach, *Répertoire*, II, 283, 8. Helmet inlaid with silver. 9. *Glykon*. A human-headed serpent coiled on itself, with head erect. The identification of the figure is due to Mr. J. R. Fothergill. See *Lex. Myth.* s.v. Glykon. Dark green patina. Height, 0.06 m. — (b) UTENSILS AND IMPLEMENTS. 10. *Greek Mirror-case*. Cover decorated with a female head in relief, profile to left; similar to British Museum *Catalogue of Bronzes*, pl. 32, 2 (No. 3211), except that here the woman wears a *sakkos*. 11. *Etruscan Mirror*, with incised design on back. 12. *Archaic Greek Louver*, from southern Italy. A large basin with plain foot, and four handles at the rim, which is decorated with bead and egg-and-dart mouldings. Two vertical handles are formed by pairs of wrestlers, who lean far forward, butting their heads together, each grasping the other's left wrist with his right hand. A combination of leaves and volutes, rising from a palmette, supports each figure. The other two handles — vertical when in use, never lower than horizontal — are oval rings swinging from bobbins, with palmettes below. The thin shell of the bowl has been badly broken, and numerous fragments are missing; the heavier parts are complete. Diameter, 0.72 m.; height, 0.28 m.; without handles, 0.195 m. 13. *Greek Situla*, also from South Italy; the upper half of it embellished with repoussé designs. A. The young Dionysus, wearing an himation about

his legs, sits caressing a panther, which stands at the left. Close behind the panther, a bearded satyr comes bringing a kantharos. At the right of the god is a maenad, dancing. B. There are very slight remains, except of the central figure, which is a woman — Ariadne, probably — seated. To the right were a panther and a maenad; at the left, a dancing satyr. 14. *Etruscan Patera*. The shallow bowl is set edgewise on a sort of spreading yoke, which a girl, standing on a small triangular platform, supports upon her shoulders. 15. *Pitcher* of rather squat form, with large oval mouth. The handle, which belonged to an exactly similar vase, terminates below in a mask of a bearded satyr. 16. *Lamp*, with six spouts and large central opening. Three chains attached for suspension. No decoration. Inscribed on the bottom, in punctured letters: ΘΕΩ ΑΓΙΩ ΑΡΕΛ CΕΛ ΨΛΕΙΟC ΜΑΓΝΟC | ΚΟΔΡΑΤΟC ΚΑΙ ΥΙΟΙ ΤΟΝ ΛΥΧΝΟΝ | CΥΝ ΑΛΥCΙ ΑΝΕΘΗΚ Ν. 17. *Boar's Head*. Ears and throat very shaggy. Probably once attached as an ornament to some article of furniture. 18. *Fountain Key* (for type compare *Bronzes de la Bibliothèque Nationale*, No. 1885, p. 640). A handle formed by the long neck of a griffin proceeded from each side of a rectangular pedestal, which supports a sort of gate-tower. Against the front of the pedestal is a serpent-legged giant, kept down by a flaming torch in the hand of a goddess (Diana? or Luna Lucifera?), who stands inside the tower as in a chariot, — such are the proportions. On either side a god or hero repels a giant attacking from the top of the griffin's head. The right side of the key has been broken away; the rest is somewhat worn and mutilated. 19. *Dagger and Sheath*. Similar to *Not. Scavi*, 1888, pl. xix, fig. 11; but the cross-piece at the top of the hilt has rounded corners. The front of the scabbard and the central seam in the back are decorated with relief lines and with incised meander, zigzags, and triangles. The blade also has fine lines down each side the rib. 20. *Iron Sword*, from Praeneste. The blade is two-edged, now 0.047 m. broad and 0.455 m. long. The grip, tapering gently toward the blade, is of ivory, carved into small squares enclosing pairs of concentric circles; it is wound at the smaller end with bronze wire. The pommel is formed by an ivory echinus, then a cylinder of bronze and ivory tongued into each other, and finally a congeries of mouldings in bronze, with diameter 0.047 m. The total length of the sword is 0.573 m. The blade is much corroded, but the weapon is otherwise in good condition; the bronze portion has a beautiful light green patina.

SILVER. — 1. *Statuette of Hermes*, seated. He is nude, with winged sandals, and wings in his hair. The attitude is much that of the Resting Hermes from Herculaneum, reversed. 2. *Repoussé Relief*, in the shape of an irregular octagon, 0.043 m. in diameter. In the centre of a feathered aegis (of a sort of butterfly shape) is the head of Medusa of the "pathetic" type, three-fourths front.

VASES. — I. From a Single Cemetery in Campania. — (a) ITALIAN WARE: GEOMETRIC, "ITALO-CORINTHIAN," BUCCHERO. 1. *Jar* of nearly spherical form, with narrow lip and small oblique handles; of coarse, whitish clay. The upper half of the vase is covered with geometric decorations in dull varnish. 2. "*Apulian Geometric*" *Pitcher*. In shape and in distribution of ornament, similar to Pottier, *Vases antiques du Louvre*, pl. 29, D 30, but the handle has a flat top. 3. *Oinochoë* of smooth buff clay decorated in lustrous brown varnish, with fine lines, straight and zigzag, and

with long rays about the base and short ones on the shoulder. 4. *Shallow Bowl*, with four small horizontal handles at the rim, resting on a tall foot, decorated with bands and long rays, in brown, lustreless varnish (become for the most part red). 5. *Oinochoë*, with rather plump body, conical neck, and trefoil mouth. 6. "*Proto-Corinthian*" *Scyphos*. Delicate ware; clay pale yellow, with a slight greenish cast. 7. *Aryballos*, with very narrow lip. About body, four birds walking to right, with rosettes and zigzags in the field. On shoulder, diamonds and rosettes; about foot, rays. 8. *Bucchero Oenochoë*, with trefoil mouth and nearly spherical body. 9. *Cylix*, of heavy gray-brown *bucchero*. — (b) ATTIC WARE (or imitation so good as to be indistinguishable). 10. *Tiny Black-figured Lecythos*, with palmettes in black and purple on the upper part of the body; below, brilliant black glaze. 11. *Nolan Amphora*, with reeded handles; lustrous glaze unevenly applied. Designs in severe red-figured style: A. Cephalus (?), with a lyre in his left hand, flees to right before Eos, who seizes his right wrist. B. Draped youth with lyre. 12. *Cylix*, with off-set lip, deep bowl, and relatively large stem. Early fine red-figured style. Interior: a standing woman with sceptre and oinochoë in her hands. On either side of the exterior, a woman and two youths, in conversation. 13. *Small Bell Crater*, in the developed fine style. A. Zeus (?), with sceptre, pursuing a woman toward the right. B. Draped youth. 14. *Pelike*. A. Nude boy, seated to right, on a knoll (indicated by fine white lines), tossing a ball. B. Nike, flying to left, a branch in her left hand, a fruit in her right. 15. *Amphora*, with twisted handles and tall body. Designs in late red-figured style: A. A landscape, with palm-tree and shrubbery and uneven ground. In the centre is Eros bringing fruit to Hippodame; behind her, Pothos adjusting a sandal for Eurynoe; at the right are Iaso and Asteria, conversing, the latter seated like Hippodame. The names of all are inscribed in white (ΕΡΩΣ, etc.). A tripod on a column, and a slender tree separate this scene from B, in which a youth with a pair of javelins pursues a woman to left, and a second woman flees to right. — (c) CAMPANIAN STYLE. 16. *Cylix*, with shallow bowl and flat foot; poor varnish. Interior: within a laurel wreath, a bathing-place — indicated by the *loutetion* at the left — in which stands a nude youth using a strigil. A female gymnast sits facing him; she wears the usual embroidered trunks, and has her hair in a kerchief. On either side of the exterior, a nude athlete between two draped youths: in A he is about to leap, in B to throw the disks. 17. *Heavy Cylix*, with off-set lip. Designs in interior only. 18. *Slender Amphora*. Lotos and palmettes on shoulder; florid palmettes under the reeded handles; dull brownish glaze, white accessories. On each side of the neck, a warrior and centaur in combat; in (a), the former is down. A. Scene at a camp. Three young warriors: one with an amphora on his shoulder; another standing with shield and spear by him; the third, who sits above, holding a spear. A helmet in the field. B. Eros flies down from the right, bringing garlands to a maenad, who stands, leaning forward, with her left foot upon a rock. A youth, sitting above, looks on over his shoulder at the scene. 19. *Amphora* of like form, covered with an orange-colored wash. 20. *Amphora* of Nolan shape, with twisted handles. A. Combat. A warrior, with sword raised to strike a man who is down before him. A female archer, in short embroidered chiton and hunting-boots, approaches from the left, and

an armed man from the right. The men have helmets, shields, chlamydes, and boots. B. A maenad, with basket of fruit, and a satyr, dancing. 21. *Amphora* of Nolan shape. 22. *Hydria*. In a panel bordered with palmettes, laurel, wave pattern, and ivy, two comic actors, confronted, dancing. 23. *Scyphos*. A. Agave, with drawn sword in her right hand, and the head of Pentheus in her left, rushes to right, preceded by a maenad holding a vine branch. B. Two maenads, with *thyrsos*, swinging a kid between them, one grasping its neck, the other its hind legs. The kid, the sword and branch in A, and bracelets and wreaths are white. 24. *Small Scyphos*. A. Female (?) tumbler. B. Draped standing woman. 25. *Squat Lecythus*. A large female head to left, wearing *sakkos*.—(d) VASES WITH OPAQUE DESIGNS ON BLACK GROUND, AND STAMPED WARE. 26–30. Five Vases.

II. Vases of Diverse Province.—(a) DIPYLON STYLE. 31–41. Eleven vases, reported to be from one grave in the neighborhood of Athens. Their clay is buff in color, with sometimes a pinkish tinge. Patterns are in lustreless varnish, applied rather unevenly, the color usually dark brown, but varying from that to brick-red in some specimens, notably Nos. 36, 40, and 41. Only No. 37 is intact; but none, except No. 41, have suffered appreciable loss. No. 40 is a pitcher; on the shoulder are, in front, two men, sitting in high-backed chairs, holding out toward each other shields of the Boeotian shape. Separated from these by small bosses are other human figures similarly seated, five on the right and six at the left, all facing the centre. What objects these have in their extended hands is uncertain, though six of them seem, perhaps, to be spinning. No. 41 is a grave amphora, in shape much like *Jb. Arch. I.* 1899, p. 194, fig. 57. A crack across the shoulder was anciently repaired with two lead cramps, which remain.—(b) BLACK-FIGURED STYLE. 42. *Fragment* (one-fourth of rim) of an early *Cylix* dedicated to Apollo. A file of three men, with spears grounded, behind a hoplite engaged in combat. Inscribed, | ΟΓΟΛΟΜΙΑΜΕΘΕΚΕ, (ὁ δὲ δῶνα τ) ὀπλό-λ[α]ωνι ἀνέθηκε. 43–44. *Fragments of two Cylixes* with offset lip; both sides of each alike. The former, decorated with a woman's head (no accessory colors) is signed by Phrynos, ΦΡΥΝΟΣ ΕΓΟΙΕΣ ΕΝΩΕ; the latter, by Tleson, son of Nearchos (ΤΛΕΣΟΝΗΟΝΕΑΡΧΟΕΓΟΙΕΣ ΕΝ), has for decoration a grazing stag, and palmettes by the handle. 45. *Two Fragments of an Eye-cylix* by Amasis; the name ΑΜΑΣΙΣ on one piece, ΕΓΟΙΕΣ ΕΝ on the other. 46. *Cylix*. On either side of the exterior, between large eyes, a satyr, stooping, lays hold of the vine that fills the field. There is a siren beneath each handle; and around the base of the bowl, a frieze of lions pursuing winged horses and a deer. 47. *Olpe*. Heracles afloat in the beaker of Helios. Published by Hartwig, *Röm. Myth.* XVII, pp. 107 ff., pl. v. 48. *Fragments of three Vases*. One a cup, signed by Nicosthenes: a bull to right; above, ΙΚΟΣΘΕΝΕΣ ΕΓΟΙΕΣ ΕΝ. 49. Part of the front of a large *Hydria*: on the shoulder, Dionysus, with six satyrs and maenads; on the body, an aged father looks on as his two sons, assisted by grooms, prepare, one for riding, the other to drive a biga. (c) RED-FIGURED STYLE. 50. *Amphora* of the period of transition from the black-figured style. The vase is attributed to Andocides by Hartwig, who publishes it, *Röm. Myth.* XVI, pp. 117 ff., pl. v. 51. *Patera*. Two youths, + ΕΝΟΦΟΝ and ΔΟΡΟΦΕΟΣ, in palaestra, exercising. (Klein, *Lieb- lingsinschriften*, p. 61, No. 5.) 52. *Cylix*, by Hermaeus. Inscribed (in

purple), HE[ρ]MA[ῖος ἐποίεσε]N. 53. *Fragment of Hydria or Amphora*. On body, Heracles, with Athena and Hermes, bringing Cerberos from Hades. 54. *Amphora* of shape similar to No. 50. In a panel half encircling the vase are two women fleeing to right before a young man with drawn sword. Style not unlike that of Phintias. 55. *Fragments of four Cylices*: one, in the style of Brygos, representing the death of Priam; another, with white-bearded Nereus (.EPEVΣ) and Nereids, in the style of Duris. 56. *Small Fragments of two other Vases* of the severe red-figured period: one a cup, with owl between olive branches, inscribed ΘΑΝΟΣ. 57. *Hydria*, with a scene from the Satyric Drama on the shoulder. Five of the chorus, wearing masks, and tights with tails and *phalloi*, are setting up a *thronos* (or a couch), of which each brings a part. A flute-player stands piping to them and beating time with his foot; behind him, at the extreme right, is an actor (?), in mask and himation, erect. 58. *Fragmentary Nolan Amphora*, with καλός-name Hippon. Klein, *Liebblingsinschriften*, p. 140, No. 2. 59. *Small Fragment of Vase* of same form, size, and style, inscribed ON ΚΑΥΟΣ (the name doubtless Hippon). 60. *Hydria*, published by HARTWIG, *Mon. Mem. Acad. Insc.* X, pp. 55 ff., pl. viii. At the right is Danaë, with Perseus on her lap, sitting in an open chest; a girl, a maidservant, and a man stand looking at them. Hartwig interprets the scene as just prior to the chest's being cast upon the sea. It is, however, equally possible to see here the moment of Danaë's rescue; the man, who leans on a knotted staff, not a sceptre, being then Dictys the fisherman instead of King Acrisius. 61. *Hydria*. Shape as No. 60; lip and greater part of left side lacking. Amphiaraus (Α . . ΙΑΠΕΟΣ) armed, bidding farewell to Eriphyle (ΙΦΥΛΗ), only a bit of whose hair, with radiate fillet, appears. At the right stands a nurse with the child Amphilocheus in her arms. 62. *Loutrophoros*. The form and scheme of decoration like *Sammlung Sabouroff*, pl. 58-59. A. Reaching three-fourths around the vase, a bridal procession. A young man leads his bride, near whose head fly two Erotes, by the hand. She is followed by the *nymphœutria*, and two women bearing gifts. At the right, before the bridegroom's house, stands his mother with a torch in each hand, and inside the half-open doors, his sister. An Eros sits upon the step. B. A young man in travelling costume clasping his father's hand in farewell. This parting scene — it is most easily so interpreted — marks the funereal use for which the vase was destined. On each side the neck is a draped woman; in A she holds a loutrophoros and fillet, in B a torch. 63. *Pelike*. A. A woman standing at the left holds a Corinthian helmet for which a young man, with spear and shield (device, a lion), is waiting, his head already bound with the padded helmet band. Behind him stands a second youth in chlamys and petasos, with a spear in his right hand. B. Three standing figures. 64. *Small Fragments of Six Vases* of the fine red-figured style. (a) a cylix, had a scene from the Satyric Drama (a woman and two of the satyrs remain). (b) Argos at the point of being slain. (c) Part of the face and chest of Athena, of large proportions and grand manner, with Nikè apparently flying from her hand. (d) inscribed Αφρο]ΔΙΤΗ over the head of a seated woman, behind whom is another using a tympanon as a mirror. 65. *Three Fragments of a Hydria* in the style of Midias. A band of meanders and checkered squares separated a lower frieze from a design above. Much of the latter is preserved; of the former, only a maenad's

head and the top of two *thyrsos*. At the right of the upper design is Persephone (ΦΕΡΦΑ . . .), pointing over the shoulder of Demeter (ΔΗΜΗΤΗΡ) toward the central scene, wherein are Triptolemos, seated in his winged car drawn by serpents, and before him an initiate and his introducer, the former carrying the *bakchos*, the latter two torches. 66. *Fragmentary Pyxis Cover*, with apparently again a scene from the Mysteries. A man with a *bakchos* stands before a seated woman; behind her (at the left) are a standing woman and a seated man, who wears a petasos like that of Hermes in the pelike from Kertch with scenes from the Eleusinian Cycle (*Compte Rendu*, 1859, pl. 1.) At either edge of the fragment seem to be statues of goddesses. 67. *Oinochoë* of squat form: a young man fully armed stands before his white-haired father, who is seated in a chair, to right. 68. *Bell Krater*. A. Prospective sacrifice to Hermes. The god stands watching a youth approach astride a goat, clinging to his horns and attempting to control him. Two *pinakes*, and a herm on a small shelf, above, indicate that the place is sacred. B. A draped youth. 69. *Fragments of Three Vases* of late fine style: one of them, Apulian, picturing the death of Actaeon. 70. *Colossal Apulian Amphora*. On the neck, in floral ornaments: (a) Helios driving his quadriga, (b) seated Genius. On the body: A. Achilles, with Phoenix, sitting in his tent (the usual aedicula). Before it the severed head and body of Thersites, in the midst of overturned vases. A slave, Dmos, fleeing to right; on the other side Automedon on guard. Diomedes, rushing threateningly toward Achilles' quarters, is restrained by Menelaus, whom Aetolus follows. Agamemnon (ΑΓΑΜΕΜΜΩΝ) and Phorbas approach from the left. Above are Pan, Poena, Athena, and Hermes. The names of all are incised. B. Offerings at a tomb. The dead, a young man, stands beside his horse in a heroön. Three persons with offerings, on either side. From Ceglie, near Bari. Described, while still in fragments, by Mayer, *Not. Scavi*, 1900, pp. 509-511. — (d) POLYCHROME AND PLASTIC VASES. 71. *Very Small Fragment of Glazed White Ware*, with drawing of severe style in black lines. The aegis and left hand of Athena. 72. *Fragment of a Very Large Cylix*, with interior design on white ground: A man threatens drawing his sword against another, also armed, who starts back from him. 73. *Cylix*, without stem; of very thin ware, with dark red glaze. Interior medallion in red-figured technique: a woman seated to right. 74. *White Lecythus*. Scene at the house of a bride on the eve of her wedding. 75. *White Lecythus*. At the left a woman with a basket of fruit stands facing a second woman who is seated in a chair and supports an Eros on her extended right hand. 76. *Plastic Cantharus*. Two female heads, joined close behind the ears and rising from a common neck, support the cup. 77. *Rhyton*, in the form of a bridled horse's head, resembling the vase published in the *Compte Rendu*, 1881, p. 65, except for the size and position of the animal's ears. Designs in the style of Brygos: on the front of the cup, a silenus creeping to left; on the right a maenad fleeing wildly; on the other side a silenus in hot pursuit. 78. *One-handed Cup*, with flaring lip and designs in fine red-figured style. The support for this cup is formed by a black pygmy, with brown hair, dragging along a great white crane, slung over his shoulder by its neck. 79. *Rhyton* of unique form, from the Bruschi Collection, Corneto. As seen from above: a finely modelled mask of a bearded man with Corinthian

helmet tipped back, a few locks of hair, curly like the beard, appearing from under it; his mouth slightly open. A small handle (large enough for one finger only) projects from behind each ear; and, from under his chin, the mouth by which the cup was filled, in shape like a cockle-shell. As seen from below: a grotesque face, with long, flowing beard (the outside of the "cockle-shell"), thick lips, broad nose, almond eyes (crossed), and slanting eyebrows, beneath a pointed cap. Two warts on the flat nose, and protuberances either side of the mouth—the long mustache draped over them—served as the feet on which the cup stood. Through the common tip of the cap and helmet is the small opening by which the rhyton was intended to be emptied. 80. *Plastic Vase* with trefoil mouth. Leda and the swan. 81. *Aryballos* in the form of a negro head; of porcelain, now palest blue. From Naukratis. — (e) VASES WITH RELIEFS AND STAMPED DESIGNS. MISCELLANEOUS. 82–90. Of interest are: 83. *Ladle* with strainer, operated on the principle of the siphon; a smooth buff clay, unglazed. To the list of "*klepsydrai*" given by Maltezos, 'Εφ. 'Αρχ. 1902, coll. 17 ff., this vase is to be added, and presumably the vase in Berlin (No. 1278), as well as a bronze in this Museum, similar to that published by Zahn, *Athen. Mitth.* 1899, p. 342, Fig. 4, but lacking the handles (*Annual Report*, 1899, p. 50, No. 40). 87. *Medallion of a Calenian Bowl*, signed K. ATILIO. Ajax seizing Cassandra by the hair with his left hand, his right restrained by a Cupid.

TERRA-COTTAS. — The thirty-nine numbers are described with considerable detail, but do not contain any unusual types. No. 26 is a group of two girls playing with *astragali*, and Nos. 37–39 are "Campana" Reliefs from Rome. See Hartwig, *Jh. Oesterr. Arch.* I. VI, 1903, pp. 16–31; *Am. J. Arch.* VII, 1903, p. 479.

GEMS AND JEWELLERY. — The sixteen numbers described in full include five seals, perforated for swivels, among them a North Syrian cylinder and two Persian seals, eight intaglios from rings, two pairs of Etruscan earrings, and an Etruscan fibula of the "snake-type." One of the intaglios bears the Tyche of Antioch, seated, and below her the Orontes, swimming; another shows Jonah, being cast forth from the ship with the waiting fish below; a third contains a representation of the Good Shepherd with one sheep on his shoulders, and three standing by.

COINS. — Sixty-two Greek coins are briefly catalogued. Of these thirty-six are from Italy and Sicily, fourteen from Greece and the North, and twelve from Asia Minor and Africa.

In addition to the Bartlett collection, the Museum has received eight vases and terra-cottas from Rhodes, including three "*Fikellura*" amphorae, casts of one of the Greek sarcophagi from Sidon (No. 6 in Hamdi Bey and Reinach, *Une Nécropole royale à Sidon*), of a bust of Aphrodite at Arles, and of two large Syrian doorways.

To the Egyptian Department Mr. Theodore M. Davis has given a collection of forty-five vases and other objects in blue glaze, each bearing the name of Thothmes IV, as well as several other objects, all from the royal tomb in the Valley of the Kings at Thebes. He has also given a leather garment (perhaps an ephod) in the form of a large apron, of the finest and softest gazelle-skin. Except for a solid border and rectangular panel on the breast, the garment is of open network, made by cutting the skin with a

knife, leaving meshes so fine that they are thread-like in size. With it is the small painted box in which it was folded up for safe-keeping. The *Bulletin* of the Museum for March, 1904, states that in the box, which bore the inscription, 'Mai-her-pri, Cupbearer,' were two of these tunics, and adds that the network has been produced without the excision of any fragment by many series of cuts running lengthwise of the garment, each series interrupted about every quarter inch by a minute space left intact, the interruption in one series being opposite the middle of the cuts in the next. Over the whole surface of the skin these cuts succeed one another with absolute regularity, about forty to the inch, producing a network of thread-like fineness which proves easily expandable to twelve times the dimensions of the untouched skin. From the Egypt Exploration Fund have been received many objects of unusual importance from Abydos, Hibeh, and Qarara, including an interesting inscribed stele of the fifth dynasty. The purchases of the year were directed to filling gaps in order to produce good typical examples of the art of each period. Among these purchases were a fine series of tiles in polychrome glaze from a palace of Rameses III, representing a procession of Asiatic and African captives, and a portrait head of the king in enamelled glass. Most important, however, is the acquisition of two complete mastaba chambers of the fifth dynasty, from Sakkara, containing interior walls of finely worked limestone, completely covered with painted low relief of the most beautiful and delicate quality, representing many scenes from the life and customs of the Old Empire. These chambers cannot be set up in the present Museum building. From the Middle Empire come a series of wooden figures from El Bershel, and the excavations of Chassinat at Assiut.

ARIZONA. — A Cluster of Ruins. — Near the Black Falls, on the Little Colorado River, are three groups of ruins of the character common in the Southwest. They are small buildings, with low walls, of fairly good masonry. The lower rooms seem to have been entered from the roof; and when windows are present, they are mere lookouts. Near these ruins are cemeteries, where the dead were deposited in stone cists, now covered by sand. It seems probable that these ruins were occupied by the Snake Clans before moving to Walpi. The pottery is distinctly northern in character, and nothing points to a very ancient date of settlement. (J. W. FEWKES, *Rec. Past*, III, 1904, pp. 3-17; 14 illus.)

BRITISH COLUMBIA. — Shell-heaps on the Fraser River. — *Rec. Past*, III, 1904, pp. 79-90 (5 figs.), contains a description by H. I. SMITH of the characteristic shell-heaps along the lower Fraser River. The typical shell-heap is several hundred yards in length, about thirty yards in width, and three or four feet in height, though some are much larger. Human remains are sometimes found, but the chief objects are implements and ornaments of stone, bone, and horn. The culture of the ancient people who discarded the shells forming these heaps was essentially like that of the present natives, but under a stronger influence from the interior.

HONDURAS. — Ruins at Indian Church. — In *Am. Ant.* XXVI, 1904, pp. 32-37 (fig.), Rev. F. DE P. CASTELLS describes some ruins near Indian Church, a settlement in the northern part of British Honduras. The building seems to have been an Indian oracular temple, of a plan similar to those found at Palenque and Ococinga. It is argued that it was the work, not of the Toltecs, but of the Itzaes, who retreated before the Toltecs.

IOWA.—**A Series of Mounds.**—In the *Iowa Journal of History and Politics*, 1904, pp. 34–68 (7 maps), D. J. H. WARD reports a survey of the prehistoric earthworks along the Iowa River between Iowa City and the Big Bend (Scales's Bend). In all he describes in detail eighteen groups, with from one to seventeen mounds in a group. The work represents only a small part of what should be done in the state. The mounds are rapidly being destroyed by farmers, and interference for their preservation by the state government is strongly urged.

BYZANTINE, MEDIAEVAL, AND RENAISSANCE ART GENERAL AND MISCELLANEOUS

ATTICA.—**A Ruined Church.**—In *Ann. Brit. S. Ath.* IX, 1903, pp. 388–390 (4 pls.; 2 figs.), HEATON COMYN publishes detailed plans and drawings and a very brief description of a ruined church and monastery at Daou-Mendeli, Attica. The church is now badly ruined, but must have been an interesting and beautiful example of the small Greek convent. The outer narthex seems to have been added in the seventeenth century; the rest is earlier, but of uncertain date.

CYPRUS.—**A Byzantine Treasure.**—At Lapithos, in Cyprus, a treasure consisting of coins, jewels, and silver articles has been found. The coins range in date from 565 to 685 A.D. Three silver plates were found, of more than ordinary interest, decorated in *repoussé* with a marriage scene, 'David inspired,' and 'David in combat with the Bear,' respectively. The objects most resemble those published by Dalton in *Archaeologia*, 1900, and were found in the same locality. The finds are now in the possession of the British government. (ENLART, *B. Soc. Ant. Fr.* 1903, p. 172.)

SOBAG.—**The White Monastery.**—At the meeting of the Archaeological Institute (London), on June 1, C. R. PEERS read a paper on the White Monastery near Sobag in Upper Egypt. It was founded by St. Shanûda in the fifth century, and its church was considered one of the largest in the world. The existing remains, though neglected and threatened with destruction, give some idea of what the original splendor must have been, and are architecturally finer than any other Christian building in Egypt. One of the most interesting points is the survival of certain details belonging to the ancient Egyptian architecture. Throughout the building are pieces of undefaced ancient Egyptian work, and in the floor of the nave is a pavement of slabs with hieroglyphic inscriptions. (*Athen.* June 11, 1904.)

VLADIMIR.—**Enamels of the Twelfth Century.**—In the treasury of the cathedral at Vladimir, in Russia, is an enamel on gilded bronze representing the Resurrection. A similar enamel from Vladimir, representing the Crucifixion, is in the Boumiantzeff Museum, Moscow. Both seem to be Lorraine or Rhenish work of the twelfth century; but whether imported or the work of an artist at the court of Andrew Bogoloubski (1157–1174) is uncertain. (Baron J. DE BAYE, *M. Soc. Ant. Fr.* LXII, 1901, pp. 19–24; pl.; fig.)

SYRIA AND PALESTINE

ANTIOCH.—**A Christian Inscription from Daphne.**—A Christian inscription found at Harbié, the ancient Daphne, communicated by

E. TOSELLI through V. CHAPOT (*B. Soc. Ant. Fr.* 1903, pp. 200-201), reads as follows: Ἐνθάδε κίτε Καλλιόπιος ζή|σας ἔτη κζ̄ ἔχων πιστικωτά|την ψυχὴν εὐχεσι εὐφημῶν | θεὸν τὸν δοτῆρα τῆς βροτῶν | ζόης, ὃς σοὶ παρέσχεν τὴν | ἐν οὐρανῷ πόλιν. M. Chapot concludes from the phraseology (πιστικός, εὐχος, εὐφημεῖν) that the inscription dates from a period when the epitaph-formulary was not yet constituted, and assigns it without hesitation to the fourth century.

JERUSALEM. — **A Greek Christian Inscription.** — In *C. R. Acad. Insc.* 1903, p. 641, CLERMONT-GANNEAU publishes the epitaph of the deaconess Sophia, recently discovered on the Mount of Olives. Interesting is the phrase, ἡ δευτέρα Φοῖβη, which refers to the deaconess of Cenchreae (Romans xvi. 1). The inscription seems to be of the fifth or sixth century.

AFRICA

ANNOUNA. — **A Christian Basilica.** — At Announa, the ancient Thibilis, excavations by the Service de Monuments historiques have brought to light a Christian basilica, of three aisles, 16 × 13 m., with a hemispherical apse at its east end. The apsidal arch was sustained by two columns. The *presbyterium* is raised, by four steps, above the level of the nave. On the northeast angle of the church a small door gives access, by four steps, to the baptistery, a rectangular structure with porticoes and a central court, where the baptismal pool was discovered, surrounded by six columns which originally supported a shelter-roof. On the south side of the basilica three halls were discovered. Many inscriptions were found. (BALLU, *B. Arch. C. T.* December, 1903, p. xx.)

BORDJ-EL-AMRI. — **A Christian Inscription.** — In *B. Soc. Ant. Fr.* 1903, pp. 251-254, P. GAUCKLER reports the discovery of a block bearing a Byzantine cross enclosed in a circle. One arm of the cross is broken; the other three are inscribed *-un-at-us*, probably Fortunatus, the saint to whom the church was dedicated. The circle was inscribed [*D(omus) D(ei). Glo-ri-a in esce[lsis domino et in ter]ra pax*]. This use of the *Gloria* seems to belong after the overthrow of the Vandals, and to mark the triumph of orthodoxy over the Arians.

CARTHAGE. — **Christian Lead Medals.** — On behalf of Père Delattre, PALLU DE LESSERT publishes in *B. Soc. Ant. Fr.* 1903, pp. 205-206, 208, three lead medals from Carthage. The first has on one side a monogram which Delattre reads Θεοτόκε, βοήθει; on the other, + CE|PF|OY. The second has a monogram on each side. The third has on one side, enclosed in a wreath, ΘΕΟΤΟΚΕ ΙΙΙΙ | ΟΗΘΗ | Ξ; on the other, also in a wreath, KWNICTAN|TINW · Ξ ·; that is, "Mother of God, aid Constantine." This medal, evidently a seal, belongs to a series which may be assigned to the first centuries of the Eastern Empire. It is the first of African seals to show the word *θεοτόκε* in full, the others all having the monogram.

SOUSSE. — **Christian Catacombs.** — A Christian hypogeum has been excavated at Sousse (Hadrumetum). It offers interesting examples of burial in the pavement of galleries, and in the case of some of the tombs the tufa has been cut to the shape of the body. Each *loculus* is closed by four tiles covered with plaster, scratched with symbols and characters. There is a striking resemblance to S. Callisto at Rome. (*Chron. d. Arts*,

1903, December 12, p. 327; 1904, January 2, p. 2. See also Dr. CARTON, *C. R. Acad. Insc.* 1903, pp. 607-608.)

ITALY

A BYZANTINE SEAL. — HENRY GRÉGOIRE, in the *Byz. Z.* XIII, 1904, pp. 159-160, reproduces a Byzantine seal of uncertain provenience, but found either in the province of Reggio or that of Messina. It is inscribed with the following faulty iambic trimeter, written backward: Φλωρεντίου καὶ | Οὐρεστίνας | λαμπροτάτων. The names show that the possessors of the seal were Italian Greeks, and doubtless husband and wife. Late Byzantine seals are a rarity, but mention of them may be found in the writers. Grégoire thinks that the seal dates from the eleventh century, as that period is particularly prolific in bad verses of this sort.

BOLOGNA. — **Frescoes by the Sons of Francia.** — It has been known for some time that on the pillars of the church of S. Giovanni in Monte there were some valuable frescoes, plastered over in a restoration of the church. Six of the pillars have been stripped of the plaster, and the frescoes have come to light, four on each pillar. They plainly belong to the school of Francia, and good documentary evidence assigns them to his sons, Giacomo and Giulio. (*Rass. d' Arte*, December, 1903.)

A New Madonna by Lorenzo Monaco. — The Pinacoteca of Bologna has added to its collection a Madonna ascribed to the early Bologna school. PIETRO TOESCA regards it as certainly the work of Lorenzo Monaco, and anterior to the Uffizi triptych (1410) by the same artist. He also claims the Uffizi 'Christ in Gethsemane,' ascribed to Giotto, for Lorenzo. (*L' Arte*, 1904, pp. 171-174.)

CAREGGI. — **An Unpublished Relief by Verrocchio.** — In *L' Arte*, 1904, pp. 59-61, CARLO GAMBA writes the first account of a terra-cotta relief of the Resurrection, by Verrocchio, which is now preserved in the villa at Careggi, near Florence. The terra-cotta was found, in sixty pieces, in the ceiling of one of the rooms of the villa. It represents Christ, semi-nude, rising in a glory above the opened sarcophagus tomb, the right hand raised and pointing upward, the left holding his draperies. On either side of him floats an adoring angel. The soldiers, who are five in number, recline about the tomb in various attitudes of slumber or half-awakening. The composition is remarkably like the 'Resurrection' of Luca della Robbia at S. Maria del Fiore in Florence. This relief seems to be mentioned in the list of works furnished to the Medici by Verrocchio, — a list which was presented by his brother to the commissioners of the Medici estates after their expulsion. Among some works apparently intended for their estate at Careggi is found an item, "per una storia di rilievo chom (*sic*) più figure" (see DE FABRICZY, 'Il Verrocchio al servizio dei Medici,' *Archivio Storico dell' Arte*, 1895, fasc. III). Gamba considers the work an early one of Verrocchio, executed about 1460.

CASTAGNOLA. — **Recovery of a Titian.** — A portrait formerly belonging to a Russian collection, is now preserved in the Berra villa at Castagnola above Lugano. It represents a girl, evidently a young lady of high degree, very richly attired as a shepherdess. She stands, resting her right hand on a staff. At her right is a greyhound, at her left two lambs are feeding.

The landscape reminds one of that in the 'Sacred and Profane Love,' and the manner is distinctly Titian's. There are some almost illegible letters at the bottom of the picture which have been made out as follows: *Ego Titianus Vecelli imaginem hanc de supremo Imperatoris mandato | diebus IX perficere debui MDLIII.* The same date is inscribed on the greyhound's collar. It is worthy of note that in the correspondence between Charles V and Vargas, his ambassador at Venice, there is a letter from the emperor directing Vargas to ascertain if Titian had finished "certain portraits" which he had promised to execute, and that this letter is dated the 31st of June, 1553. It is well known that Titian was spending very little time on the portraits which he painted during his connection with the emperor, so that the nine days spent on the portrait is not so surprising as at first it seems. It is possible that the portrait is that of Eleonora, daughter of Ferdinand I of Austria, niece of Charles V and afterward married to Guglielmo Gonzaga, Duke of Mantua. It is probable that the portrait was a part of the Ducal collection at Mantua and was carried off in the taking of that city. This is confirmed by a closer examination, which shows that the canvas was once cut from its frame, and by an entry in an inventory of the pictures belonging to the House of Mantua of a "ritratto di Madonna Eleonora." A photograph of the picture has been made by the Ditta Ferrario of Milan. (D. SANT'AMBROGIO in *Arte e Storia*, December 20-31, 1903, pp. 159-160, and January 15, 1904, pp. 3-4.)

FLORENCE. — **Two Works of Luca della Robbia.** — MARCEL REYMOND publishes the Madonna of the Palazzo Corsini in the *Rivista d'Arte*, 1904, pp. 1-8. It is one of Luca's "human" Madonnas, displaying great tenderness of feeling. The Virgin embraces the Child with her left arm, holding its right foot in her left hand. The Child grasps at its mother's veil with its left hand, and its face is turned upward to meet the Virgin's gaze. The group is in medallion form, and polychrome, which Raymond regards as reason for putting it into the latter part of Luca's career. This, in turn, would make it necessary to reconsider the date of the polychrome 'Evangelists' in the Pazzi chapel, which have been hitherto held to be works of Luca's youth. Raymond's is the first publication of the Corsini medallion.

The well-known lunette by Luca della Robbia, which used to stand over the door of No. 93 in the Via dell' Agnolo, is now in the Museo Nazionale at Florence. (*Rass. d'Arte*, April, 1904, 'Cronaca.')

A Crucifix by Michelangelo. — HENRY THODE has discovered a youthful work of Michelangelo's which, till now, was thought to have been lost. This is the crucifix of S. Spirito in Florence, which Thode identifies with the crucifix which still exists in that church, standing between the seventeenth-century statues of John and Mary on the high altar. Thode cites in support of his opinion the words of Richa, who says, in his work on the churches of Florence (1759): "In the chapter-room of San Spirito is preserved the crucifix of Michelangelo. It is intended to transport it to the choir of the church." (*Chron. d. Arts*, June 18, 1904, p. 195.) This identification advanced by Thode is the subject of comments by a writer in *Arte e Storia*, May 15-31, 1904, p. 72, in which Michelangelo's connection with the crucifix is scouted, on account of its cold conventionality and the absence of characteristic qualities. According to this writer, Caccini is a more probable guess.

New Drawings by Michelangelo.—In addition to the forty sketches of Michelangelo recently discovered among the collections of the Florence galleries, Sig. Ferri, government inspector of galleries, has found twenty new drawings by the master, evidently studies for the frescoes of the Sistine Chapel. He will publish them shortly in collaboration with Emil Jacobson. (*Rass. d' Arte*, March, 1904, Cronaca.) Apropos of this discovery, R. ARTIOLI makes an appeal in a recent number of *Arte e Storia* for a new edition of the Catalogue of Drawings in the museums of Florence. The revision of many attributions and the identification of many "incogniti" make a new edition necessary, and Artioli urges that some study should be expended on the architectural designs, with a view to finding out the monuments they were taken from, for their better classification.

The Frescoes in Santa Maria Novella.—The frescoes in the Chiostro Verde of the church of Santa Maria Novella at Florence, painted in the early part of the fifteenth century by Paolo Uccello and Dello Delli, have been long deteriorating from damp, some of them being almost obliterated, and others peeling from the walls. According to the *Italian Gazette*, these interesting works of art are now to be taken in hand and saved from further injury by a process somewhat akin to *decalcomanie*. Strong linen, impregnated with a special chemical compound, is placed over the fresco, which comes away bodily on to the prepared surface. The back of the fresco is then coated with another sheet of linen, prepared with a cement which hardens to a marble-like consistency and durability. After this the fresco is replaced, but not flush with the wall, a narrow space being left between the two surfaces to admit of air passing freely. The first linen covering is then removed, and it is said, from experiments already made on a fresco in the Campo Santo of Pisa, that the effect is to improve and restore the freshness of the colors. (*Athen.* May 21, 1904.)

GROSSETO.—**A Madonna, by Sassetta (Stefano di Giovanni).**—F. M. PERKINS discovered this picture in the interior sacristy of the cathedral at Grosseto, and communicates a notice of it to the *Rass. d' Arte*, May, 1904, pp. 76-77, with a phototype. The picture, now at the *Esposizione d' Arte Antica* at Siena, represents a Madonna, with the Child seated on her lap, eating a cherry, a motive not uncommon among Sienese and Umbrian painters. The painting has suffered badly from neglect, but shows no traces of retouching.

MILAN.—**Restoration of the Loggia degli Osii.**—This loggia, which, even now, is one of the most attractive of the "sights" of Milan running along the south side of the Piazza dei Mercanti, was built by Matteo Visconti in the first quarter of the fourteenth century (commenced in 1316) and derived its name from the family who owned the palace against which the Loggia was built. It has suffered considerably during the ages, the columns of the lower arcade having been encased in piers, the upper colonnade walled up, and the centre crowned with a baroque façade. It has long been intended to restore the Loggia to something like its original appearance, but means were lacking until lately. General Count Egidio Osio, descendant of the family which gave the Loggia its name, having died, his widow in 1902 offered to bear the expense of the restoration, dedicating the work to the memory of her husband. Work was commenced last year under the direction of the architects, Savoldi and Borsani, and

within a few months Milan will be enriched by one of the most pleasing and valuable monuments of Lombard architecture in Italy. (*L'Arte*, 1904, pp. 179-181.)

An Acquisition by the Museo del Castello. — To this collection has been added recently a triptych by Bernardino Butinone. It contains twelve panels, representing the Annunciation, Visitation, Adoration, Flight into Egypt, Baptism, Last Supper, Flagellation, Christ bearing the Cross, Crucifixion, Deposition, Pietà, Resurrection, and Last Judgment. It is described and a prototype of it published by G. CAROTTI, *L'Arte*, 1903, pp. 397-398.

Acquisitions of the Brera. — Casimir Sipriot, a rich merchant of Marseilles, gave to the Brera last October a collection of sixty-three pictures. They are chiefly of the Lombard school, representing Borgognone, Bramantino, Defendente da Ferrari, Bernardino Luini, and the school of Gaudenzio Ferrari. There are four of some importance: a small fresco by Bernardino Luini, representing a sleeping monk; the Dead Christ, a figure in perspective by Bramantino; an Ecce Homo, by Bernardino Borgognone; and St. Francis receiving the Stigmata, by Ambrogio Borgognone. (G. CAROTTI, *L'Arte*, 1903, pp. 393-397. F. MALAGUZZI VALERI, *Rass. d'Arte*, January, 1904, pp. 6-10.) Two paintings by Dosso Dossi, a St. John Baptist and a St. George, have recently been bought by the Brera from the Congregazione di Carità of Massalombarda. They are described by CORRADO RICCI, *Rass. d'Arte*, April, 1904, pp. 54-55.

ROME. — The Catacomb-church of SS. Felix and Adanctus. — The excavations conducted by the papal *Commissione di Archeologia Sacra* are concentrated this year on the catacomb of Commodilla, on the Via delle Sette Chiese, which runs from near S. Paolo fuori le Mura to the Via Ardeatina. A catacomb-basilica has been found, built out of what was formerly the burial crypt of SS. Felix and Adanctus. The grave of the first named was marked by an inscription stating that the basilica was erected at the expense of a certain Felix in the pontificate of St. Siricius (384-398). The basilica has one nave, and the upper part was above ground. Over the grave of Adanctus, which is a *loculus* near the foot of the stair leading into the crypt, is a fresco representing Christ enthroned on the globe giving the keys to Peter and the law to Paul, the latter being accompanied by Felix and Stephen Diaconus, the former by Adanctus and St. Merita. Over the grave of a woman named Turtura is another painting representing the Virgin enthroned, with the Child on her knee, both in rich vestments. To the right stands St. Felix, to the left St. Adanctus, who presents to the Virgin and the Child the departed Turtura. This fresco is wonderfully well preserved and, like the other, of the sixth century. Another fresco, of the seventh century, represents St. Luke, holding a scroll and a pouch, with four surgical instruments protruding from it. As this is the earliest picture of the evangelist in Rome, it is worth notice that the artist gave him no attributes of a painter. (WILPERT, *Röm. Quartalschrift*, 1904, pp. 40-41.)

Inscriptions from the Catacombs. — The excavations in the catacomb galleries north of S. Callisto, now known by the name Cemetery of SS. Marco, Marcelliano, and Damasus (see *Am. J. Arch.* VIII, 1904, pp. 128-129), have brought to light some interesting inscriptions. One is the epitaph of a *Virgo in Christo*, and another is dated *sub Julio a (utistite)*, referring to Pope

Julius I (337-352). De Rossi held that this substitution in the date of the Pope's name for that of the consuls was due to the presence of factions within the Church, the adherents of the true Pope desiring in this way to show their colors. But Julius' reign was undisturbed by factions or anti-popes, so that De Rossi's theory is not supported by this case. (WILPERT, *N. Bull. Arch. Crist.* 1903, pp. 315-319.)

TURIN. — **The National Library.** — PAUL DURRIEN, *Chron. d. Arts*, 1904, February 6, pp. 43-46; February 13, pp. 56-58; February 20, pp. 63-65, gives an interesting account of the illustrated manuscripts which were preserved in the National Library at Turin, recently burned. Among those described by Durrien as especially important is a *Scriptores Historia Augustae* adorned with medallion portraits of the emperors, the frames of which, composed of vine and flower designs, contain little animals and figures in Italian costume, whose drawing recalls the hand of Pisanello. The manuscript was finished in 1412 in Pavia. Another Turin manuscript contained some architectural frontispieces which have been ascribed to Mantegna, and are certainly of his school or of that of Squarcione. The hope expressed by M. Durrien that the gem of the collection, the famous Book of Hours of the Duc de Berry, called the *Heures de Turin*, might escape, was doomed to disappointment. Its charred remnants have been found, and offer little hope of recovering any of the miniatures. The library was founded in 1820, starting with Vittorio Amedeo II's gift of his private collection. At the time of its burning it possessed about 200,000 volumes, 4138 manuscripts, and 1905 *incunabula* and prints. There were 1200 Latin codices among the manuscripts. (See *Rass. d' Arte*, March, 1904, Cronaca; *R. Arch.* III. 1904, pp. 394-406.)

SPAIN

MADRID. — **Wooden Mannikins of the Sixteenth Century.** — At the *Exposicion Historico Europea*, held at Madrid in 1902, the Count of Valencia exhibited a curious wooden male mannikin, made of boxwood. The joints are constructed with extraordinary skill, and are operated by means of cords running throughout the members and issuing through a hole in the top of the head. The box which originally held the mannikin has a label pasted on one end, on which is written, in characters of the time of Philip II, *d'alberto D. vero*. One is naturally inclined to ascribe the mannikin to Dürer on such evidence, but the well-known abundance of erroneous Dürer attributions, some of them almost as old as Dürer himself, makes other evidence necessary. The figure has a mate in the female mannikin in the Berlin Museum, which resembles that belonging to the Count of Valencia in skill of construction. The two mannikins are in some respects so like the Dürer 'Adam and Eve' that the label on the box seems almost to be justified, and, indeed, in view of Dürer's predilection for anatomy and his great manual skill, both figures might have been constructed by him to serve as canons for his drawings. On the other hand, much can be urged against the probability that the two figures are by the same hand, they are unlike Dürer's figures in thinness of neck and summary modelling of the legs, and there is not enough evidence, in short, to convince one that they were made either by the Nuremberg master or, as has been suggested, by Conrad Meyt, his contemporary. (ÉMILE MICHEL, *Gaz. B.-A.* XXXI, 1904, pp. 135-139.)

FRANCE AND BELGIUM

FRENCH ENGRAVINGS AT ST. LOUIS. — The *Chalcographie* of the Louvre is represented at the St. Louis Exposition by sixty-seven of the best engravings of its collection, constituting a summary of the history of French engraving from the time of Louis XIV to the present day. (*Chron. d. Arts*, January 2, 1904, p. 1.)

A PAINTING OF THE FRENCH RENAISSANCE TO RECOVER.

— This is the caption of an article in the *Gaz. B.-A.* XXXI, 1904, pp. 441-450, by HENRI BOUCHOT. The interest aroused by the recent *Exposition des Primitifs français* brought to light a number of unsuspected treasures, and among them a lithograph executed in 1823 after a picture claimed to be by Fra Angelico and coming from Avignon. The Virgin occupies the centre of the picture, sheltering beneath her outstretched mantle a throng of worshippers, among whom Bouchot recognized Charles VII of France and Marie d'Anjou, the Emperor Frederick IV and Eleonora of Portugal, and Pope Eugenius IV. At either side of the Virgin kneel the donors, a man and his wife, whose names are apparently Jean and Jeanne, since behind the woman stands her patron, St. John Evangelist, and behind the man St. John Baptist. The French embroidery on the Virgin's robe and her French nimbus, besides other more general indications, afforded M. Bouchot a working hypothesis that the picture was not Italian, but French, and possibly by Enguerrand Charonton. This attribution has been entirely confirmed by documentary evidence, such a picture having been ordered in 1452 from the painters, Enguerrand Charonton and Pierre Villate, by the Celestine monks of Avignon, for their church, in honor of their benefactors, Jean Cadard, and Jeanne des Moulins, his wife. The date and the fact that Jean Cadard was physician to Charles VII explain why the artists inserted the august personages in the crowd of devotees beneath the Virgin's mantle. Even the arms represented on the altars before which the donors are kneeling have been identified with those of Cadard and Jeanne des Moulins, respectively. No picture could have a better *état civil*, to use M. Bouchot's expression, but it has unfortunately disappeared. Hence his "appeal" to the world of art-lovers in general to assist in the recovery of this interesting product of the French Renaissance.

UNPUBLISHED PAINTINGS IN FRENCH GALLERIES. — In *R. Arch.* III, 1904, pp. 317-321 (2 figs.), is commenced the publication of unpublished or little-known paintings of the fourteenth and fifteenth centuries in French galleries. S. R. describes a 'Virgin and Child' in the Museum of Nevers. The painting is on wood, and quite well preserved. It has been attributed to the Florentine and to the Neapolitan School of the end of the fifteenth century. MARY LOGAN writes on another painting of the same museum, a Virgin and Child surrounded by angels, which she tentatively attributes to Lorenzo di San Severino the Younger, who died in 1503. The two pictures are reproduced from photographs of Mr. de Saint-Venant.

AUCHIN. — **Two Heads of the Fifteenth Century.** — In *M. Soc. Ant. Fr.* LXII, 1901, pp. 1-8 (pl.), C. EULART publishes two heads from the monastery of Auchin, in the Museum of Douai, which recall those of the mourners on the tombs of Bourges and Dijon. They evidently belonged to

a contemporary monument, and show that Flemish sculptors of the fifteenth century in Flanders worked on the same models and in the same style as at Dijon.

BRUSSELS. — Acquisitions of the Museum. — The collection here has recently been enriched by an interesting series of pictures. They are: a family-group by Martin de Vos, dated 1577; 'The Healing of the Palsied Man,' by Van Lint, signed PE V. LINTF, 1642; Jordaens, 'A Bacchanalian Revel'; two Dutch paintings, the first probably a distant view of the Hague by A. van Croos, dated 1653, the second a portrait of a young woman of the seventeenth century, signed P. D. H. (Pieter van Hooch?). (*Chron. d. Arts*, December 26, 1903, pp. 343-344.)

GHENT. — Inauguration of the Musée des Beaux Arts. — On the 9th of May, 1904, the King of the Belgians formally opened the new Musée des Beaux Arts at Ghent. The museum occupies a high ground-floor. The first hall as one enters is devoted to sculpture in marble, set off by olive-green plush tapestry. From this room one passes to the great central hall, containing the bronzes and a series of Brussels tapestries executed after designs by French masters of the eighteenth century. To the right are a dozen rooms reserved for old masters, the corresponding rooms at the left of the central hall containing modern pictures. Besides these rooms, there is a hemicycle, which has been converted into a winter-garden and affords a place for ancient sculpture and casts. (*Chron. d. Arts*, May 14, p. 163.)

LANGEAIS. — A Present to the French Institute. — The castle, situated at Langeais in the valley of the Loire, near Tours, was built in the tenth century, and has been restored and furnished by its last owner, M. Siegfried, according to mediaeval models. He has now presented it to the Institute. (*Rass. d'Arte*, February, 1904, Cronaca.)

PARIS. — Acquisitions of the Louvre. — There have been recently added to the Louvre collections: a small ceiling painting by Tiepolo, formerly in the private chapel of the Palazzo Grimaldi at Genoa, representing the Virgin in glory; twenty-eight statuettes or appliqué figures in gilded bronze, dating from the twelfth to the sixteenth century, largely French, given by M. Maciet (*Chron. d. Arts*, December 12, 1903, p. 326); El Greco, 'St. Ferdinand of Aragon,' and a Franco-Flemish 'Deposition' of the fifteenth century (*ibid.* December 26, 1903, p. 341). By the Arthur de Rothschild legacy the Louvre has acquired two paintings by Teniers; a 'Marine,' by Backhuysen; a 'Group of Cavaliers,' by Wouwermann; two landscapes, by J. Ruysdael and Hobbema; and four canvases, by J. B. Greuze; by the Princess Mathilde legacy, a bust of the princess, by Carpeaux; a portrait of a woman, by Reynolds (the first Reynolds to enter the Louvre); a Spanish portrait, very like Velasquez; a portrait of a man, by Dauloux; and a portrait of himself by Roslin; by the Albert Bossy legacy, besides other pieces, a Madonna and Child surrounded by angels, in a manner resembling that of Filippo Lippi; by purchase, two portraits of women, by Hoffner and Raeburn respectively. (*L'Arte*, 1904, pp. 177-178.) The Société des Amis du Louvre has just acquired, with a view to offering them to the museum, two Romanesque columns of the twelfth century, from the Abbaye de Coulombes (Eure-et-Loire). Their capitals are sculptured with scenes from the history of the Magi, and surmounted with fantastic animals, the

style in general being that of Chartres. (*Chron. d. Arts*, March 26, 1904, p. 101.)

Reappearance of Bernardino Licinio's 'Herodias.' — This picture, which has been in hiding ever since the dismemberment of the Sciarra-Colonna gallery in Rome (1891), has now turned up in the collection of Baron Lazzaroni at Paris. It was long famous as a Giorgione, until Crowe and Cavalcaselle proved its real authorship. A replica of the picture, by Licinio himself, is in the Leuchtenberg collection at St. Petersburg. (E. BERNARDINO, *L'Arte*, 1903, pp. 380-381, with phototype.)

GERMANY

BERLIN. — **The Kaiser-Friedrich Museum.** — The Berlin Picture Gallery and the collection of Christian sculpture will be established in the Kaiser-Friedrich Museum in October of this year. The director, W. Bode, is contemplating furnishing the rooms with furniture of appropriate date, old majolica, bronzes, etc., to relieve the pictures and statues of the "show" effect. Among the recent acquisitions of the gallery are: an Adoration of the Shepherds, by Hugo van der Goes; a bust of Acelino Salvago, by Tamagnino (1500); two Sibyls, by Giovanni Pisano; an ancient plaster impression of the relief, by Desiderio da Settignano, which stands in the Via de' Martelli, in Florence, opposite the Palazzo Riccardi; a large marble statue of the Virgin from Montepulciano, ascribed by Justo to Giovanni di Agostino, the sculptor of the relief in the oratory of S. Bernardino in Siena; and a Madonna, by Lorenzo Monaco. (P. SCHUBRING, *L'Arte*, 1904, pp. 176-177.)

BRESLAU. — **An Exhibition of Miniatures.** — During October and November, 1903, an exhibition of miniatures, made or owned in Silesia, was held at Breslau. In *R. Arch.* II, 1903, pp. 420-424, J. BRAUN gives some account of the more important pieces in this collection, which included illustrated manuscripts, portraits, and *genre* scenes from the first part of the thirteenth century to the nineteenth. The earliest Silesian specimens are a *Psalterium nocturnum* and a Cistercian *Graduale* of the first half of the thirteenth century. The most important works on exhibition were two Burgundian manuscripts of the fifteenth century, which had belonged to the Bastard of Burgundy, son of Philip the Good (1421-1504). One was a French translation of Valerius Maximus, the other a Froissart in four folio volumes, prepared in 1468-1469 by David Aubert of Hesdin for Anthony of Burgundy. There were also interesting Hebrew, Arabic, Turkish, and Persian miniatures from the sixteenth to the eighteenth century. Of special interest are the drawings from family albums from the sixteenth century down, containing portraits as well as satirical or moral pictures, and views of contemporary life. Upward of four hundred portraits in miniature represented the work of Silesian artists of the last century, as well as earlier foreign painters.

AUSTRIA

TOEPLITZ. — **Recovery of a Costa.** — The *Gazzetta di Mantova*, March 3, 1904, published a communication by G. B. INTRA announcing that a portrait by Lorenzo Costa, once the property of the Dukes of Mantua, has been found at the castle of Toeplitz in Bohemia, the property of Prince Clary Aldringer, a descendant of the Aldringer who commanded the imperial army which

besieged and took Mantua in 1630. It represents Federico Gonzaga, afterward Duke of Mantua, on horseback, surrounded by his staff and soldiers, and is described in detail by Vasari, who says it was among the last of Lorenzo's works. The portrait is signed *L. Costa F. MDXXII.* (*Arte e Storia*, March 15, 1904, pp. 39-40.)

GREAT BRITAIN

DURHAM.—**Discoveries in the Abbey Cloister.**—*Archaeologia*, LVIII, pp. 437-457 (4 pls.; 2 figs.), contains a report by W. H. ST. JOHN HOPE of recent excavations in the cloister of Durham Abbey, with an introduction on monastic lavatories and lavers by J. T. FOWLER. The excavations brought to light the small foundations of a twelfth-century laver, and the traces of a larger octagonal thirteenth-century lavatory in the south-west corner of the cloister, within which was placed in the fifteenth century a new octagonal laver, into which the water poured from twenty-four brass pipes, according to a later description. The old convent well was also found and cleaned out.

HUNSTANTON.—**A Saxon Brooch.**—In *Proc. Soc. Ant.* XIX, pp. 172-174 (fig.), HAMON LE STRANGE describes a gilt bronze cruciform brooch found in the Saxon cemetery at Hunstanton (Norfolk). It had been broken across the centre and strongly mended by two bronze rivets.

NORTHAMPTONSHIRE.—**Recent Discoveries.**—In *Proc. Soc. Ant.* XIX, pp. 307-314 (3 figs.), J. A. GOTCH and T. GEORGE report recent discoveries of Anglo-Saxon burials at Kettering and Duston. At the former place about eighty urns and six skeletons have been found. The former are for the most part decorated with the usual impressed designs. From Duston, hitherto known only for Roman antiquities, come several bronze brooches and glass and amber beads, found with six unburnt burials. Near Ketterington has been found a clay cup of the early Bronze age, and of a rare type.

NORTH LUFFENHAM.—**An Anglo-Saxon Graveyard.**—At this village in Rutland Saxon objects were found in 1863, but in 1901, while digging for sand, a series of graves was opened. In two, soldiers had been buried, with spear, sword, and shield. Another grave, probably that of a woman, contained three urns and two brooches. Later a very fine gilt cruciform brooch was found. (R. HAINES, *Proc. Soc. Ant.* XIX, pp. 195-198; 2 figs.)

UNITED STATES

BOSTON.—**Acquisitions of the Museum of Fine Arts.**—The *Annual Report* for 1903 (Cambridge, The University Press, 1904) contains an account of some important additions in the departments of mediaeval and modern art. The Susan Cornelia Warren bequest has made possible the purchase from the collection of the testatrix of two portraits by Sir Thomas Lawrence; 'L'Eminence Grise,' by J. L. Gérôme; 'Dutch Interior,' by Pieter de Hoogh, and six other paintings. By the bequest of Josiah Bradlee were received five pictures, including two by E. Delacroix, and a remarkably fine example of Bonington. The children of Mrs. Warren have given 'The Death of the Virgin,' by Michael Wohlgemuth; an exceptional example of this little-known master. A panel at the base shows it was a memorial piece for Hedwig Volkamer, who died in 1479. Among the purchases are, 'Danaë and the Shower of Gold' and a 'Head of an Old Man,' by Rem-

brandt; 'Chevaux de Course,' by Degas; and portraits by Van Dyck, F. J. Goya y Lucientes, H. Inman, and T. Sully. Francis Bartlett, who presented the cast of the Colleoni statue in 1902, has given also a full-size cast of Donatello's equestrian statue of Gattamelata in Padua. Like the earlier gift, this cannot be exhibited in the present building.

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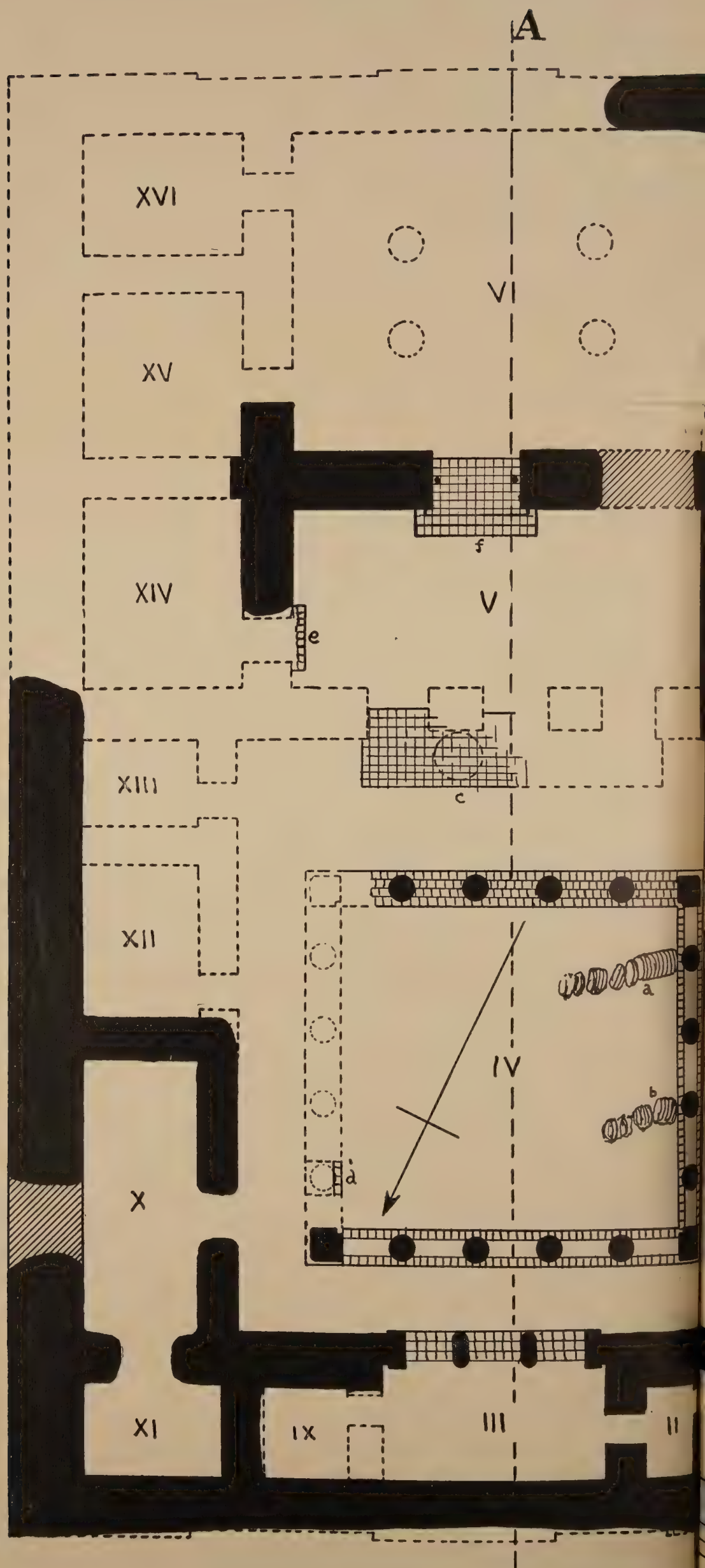
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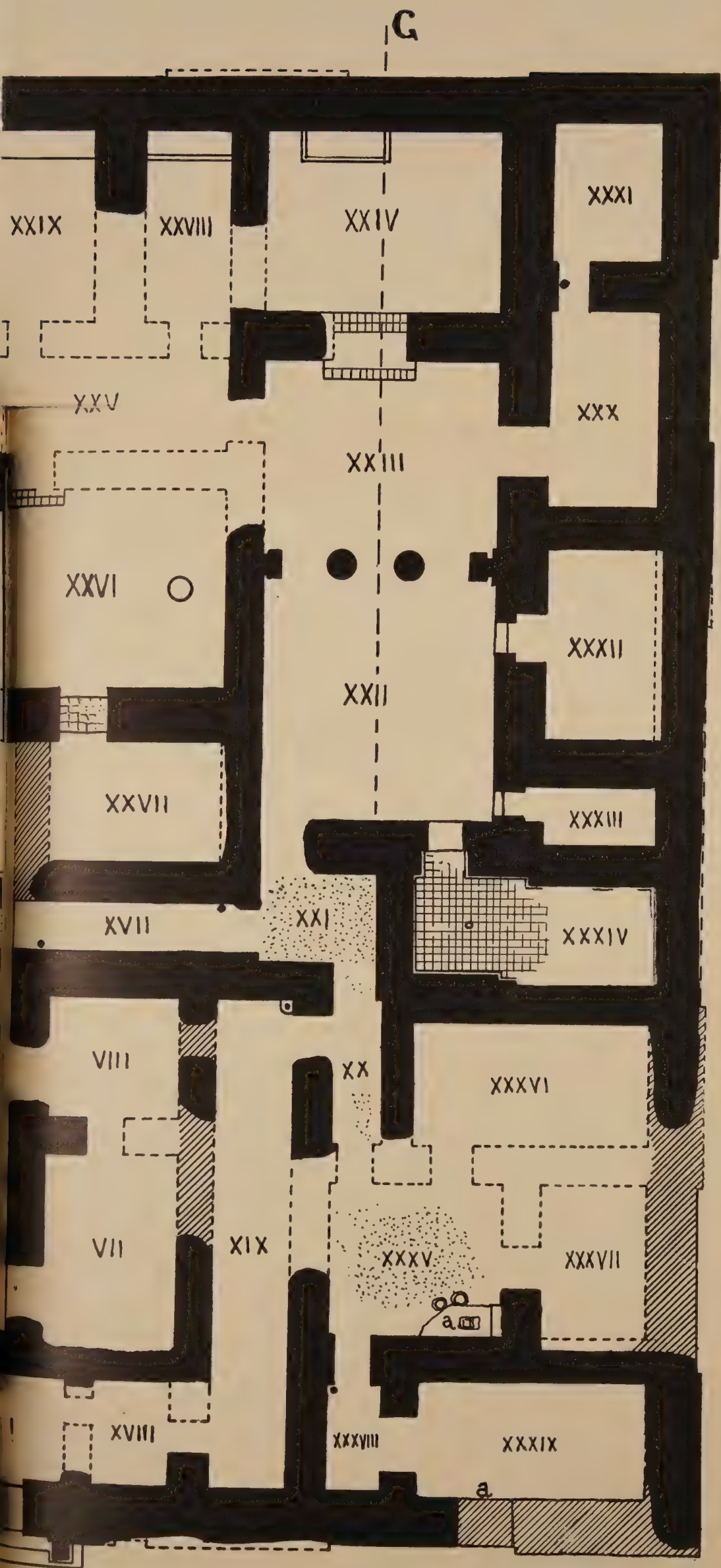
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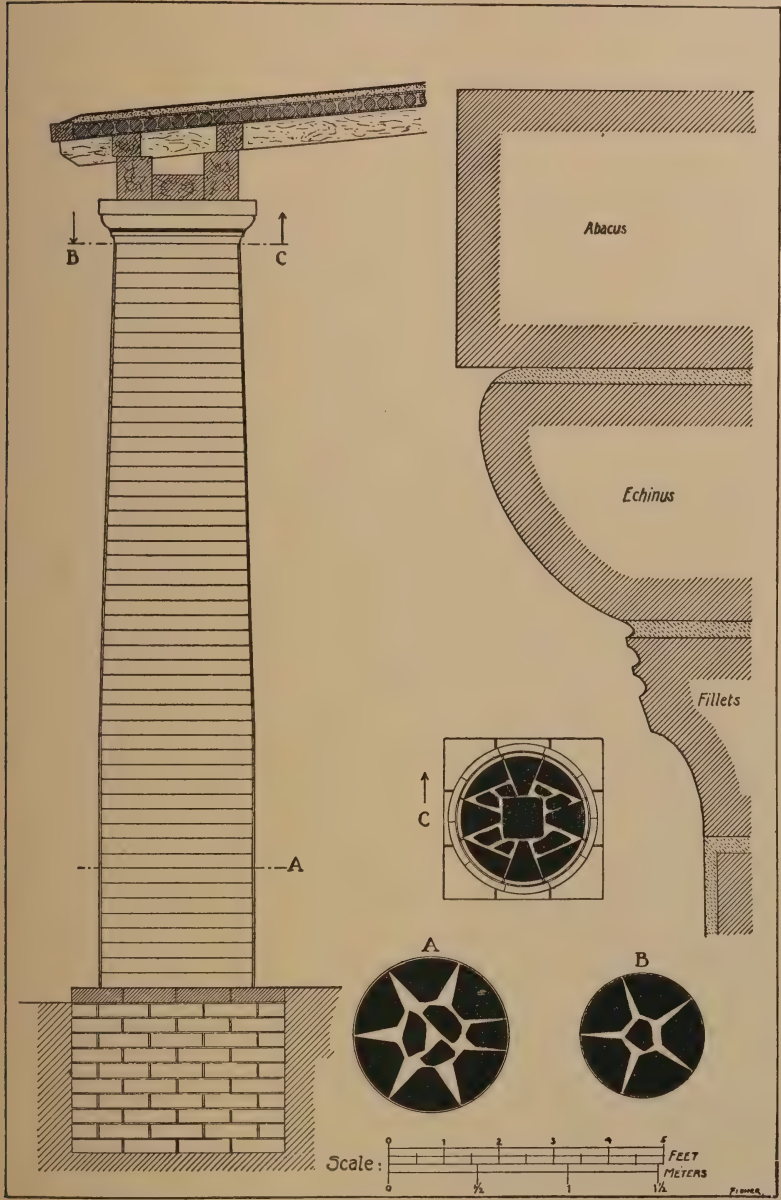
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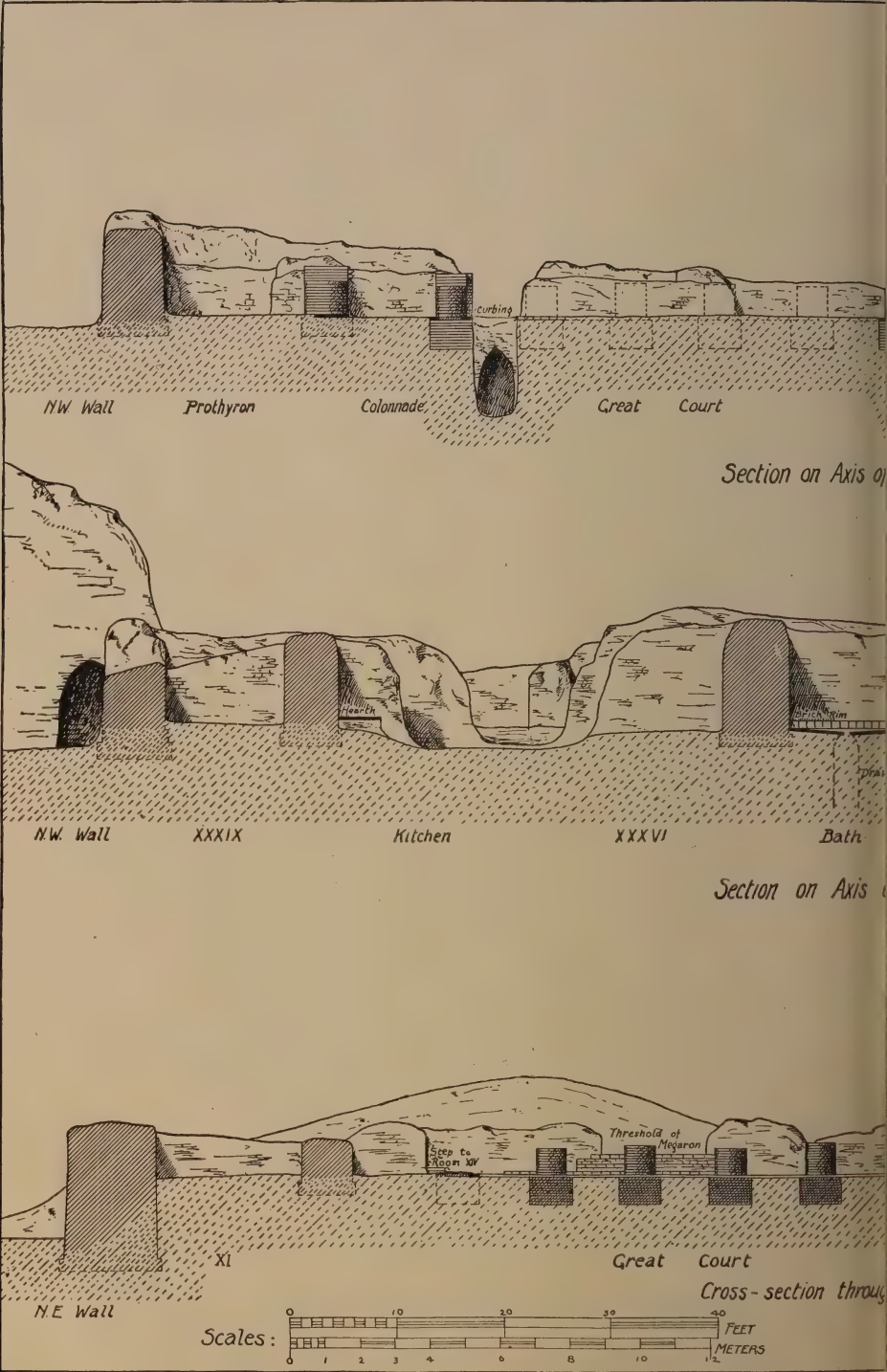


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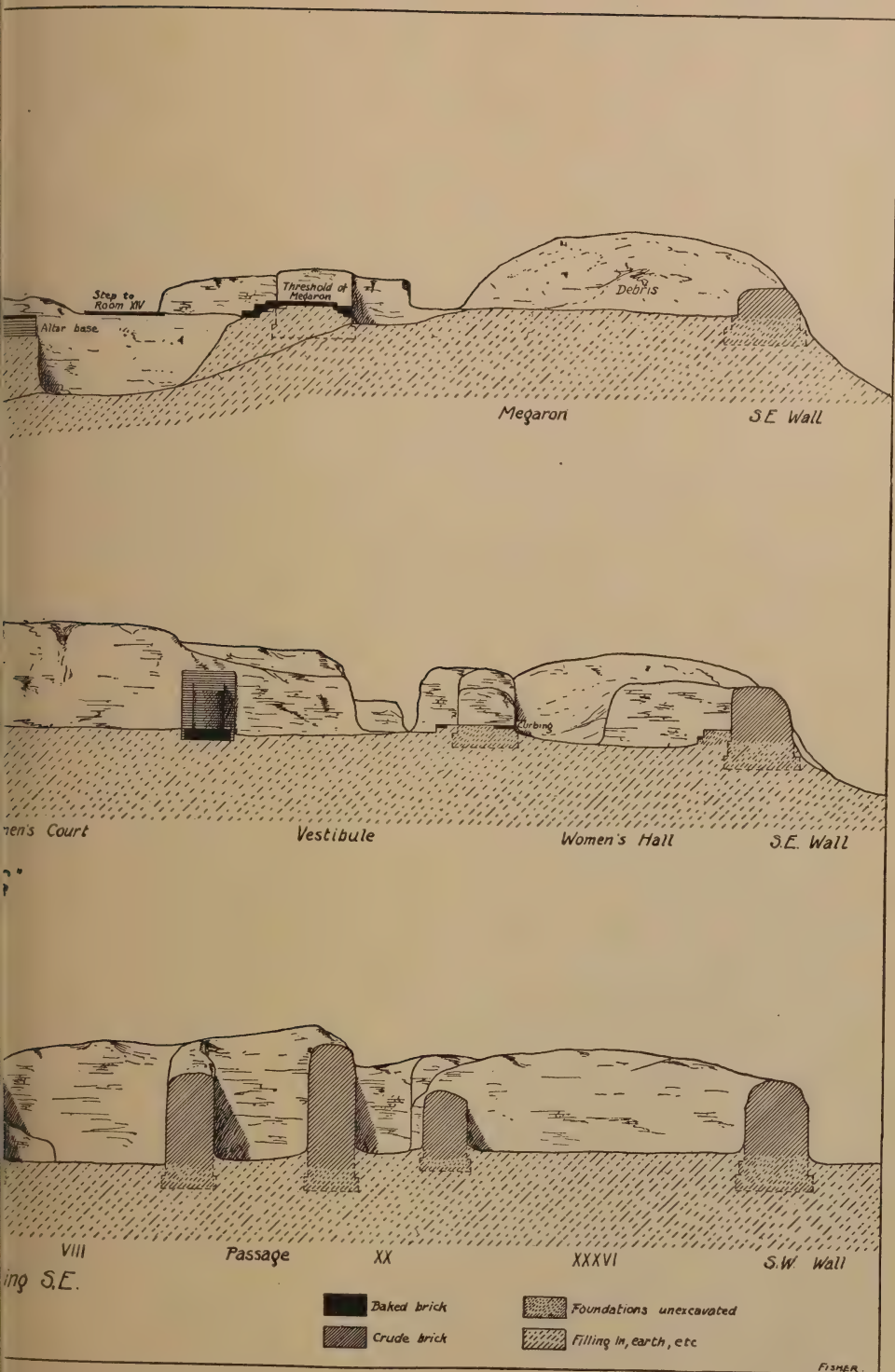




DETAILS FROM THE PALACE AT NIPPUR: THE COLUMNS IN THE PERISTYLE COURT



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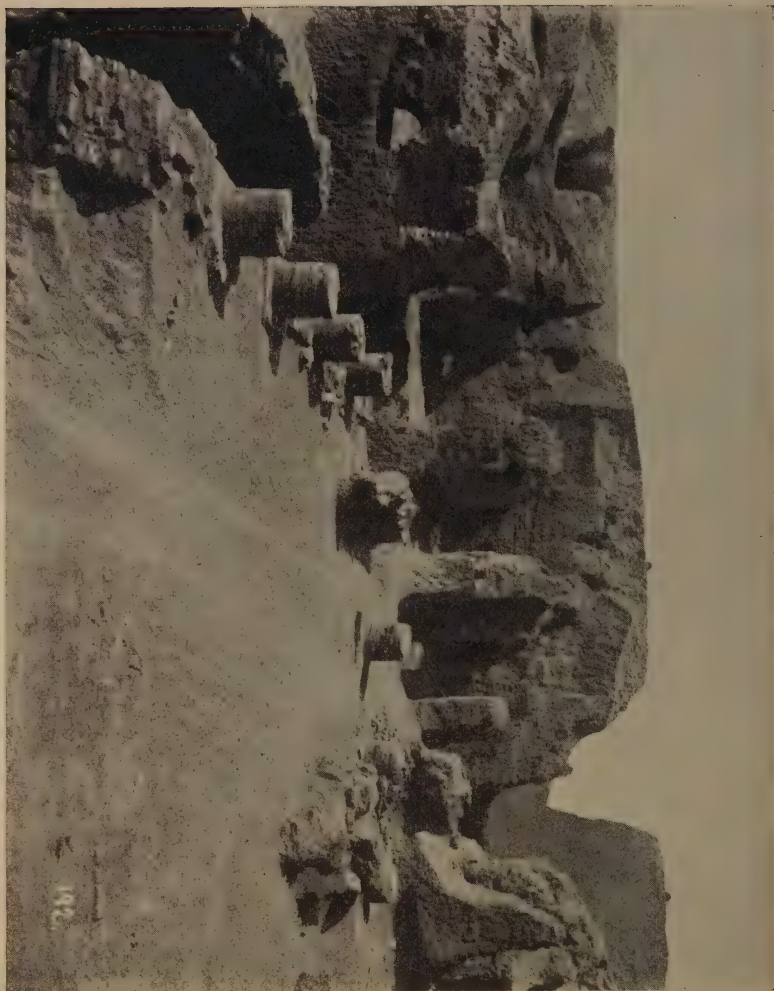
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THE MYCENAEAN PALACE AT NIPPUR

[PLATES XIV-XVI]

THE attention of students of the Mycenaean period, during the last few years, has been centred in the islands of the Mediterranean, where the excavations at Knossos and other sites in Crete have thrown new and important light on that age. So certainly has the sphere of Mycenaean influence appeared to be confined to the Mediterranean and its borders that its sudden extension to the centre of ancient Babylonia comes as an almost impossible revelation. Yet that is just what is meant by the discovery at Nippur, by previous expeditions to that site, of numerous votive steles, figurines, and other objects bearing the characteristics of the Mycenaean age. Now, in addition to all these, we have completely opened up a palace which has an arrangement of courts, halls, and passages exactly similar to that at Tiryns, and comparing favorably with it in size. At present this palace is the only one of the kind uncovered, but the further excavation of the mound in its immediate vicinity is sure to disclose others of the same type. It is impossible that a solitary example of a Greek house should have been erected in a foreign land, where all the customs and systems of building were contrary to the life suggested by the plan; and, taken in connection with the objects found all over the rest of the site, we must conclude that the building formed a part of a settlement on the ruins of the older Babylonian city. The object of the present paper is to give somewhat briefly the position and characteristic features of this palace,

FIGURE 1.—THE PALACE AT NIPPUR, LOOKING OVER THE GREAT COURT FROM THE NORTHEAST.



and some of the reasons for assigning it to what I feel is its true place in architectural history.

Naturally, we turn at once to the strata for evidence of dates. But we must take into consideration several features of this stratification which are peculiar, not only to Nippur, but to many of the sites in other parts of the country, where we have a long succession of different periods represented by buildings.

First, we must note that, while the earlier towns were built on the unobstructed horizontal surface of the plain, the later ones had to conform to the gradually accumulating débris of the successive periods. So that while we have the first few strata comparatively parallel to one another, the later ones become more and more irregular, until, at the close of its existence as a dwelling-place, Nippur had the appearance of many a town of the middle ages, built upon and around a hill, tumulus, or mound. The last period in many cases will be but a few feet above one of the very earliest, so that unless we make due allowance for this conformation, we are apt to confuse the different strata and their dates, especially as, in the case of the palace described in this article, we have practically no dateable objects belonging to the building itself to guide us.

Obviously our safest plan is to take a point near the highest part of the mound, where the successive strata have the truest relation to each other, and where we can obtain the perpendicular depths most correctly. It is by such methods that we have been able to show that the palace belongs to a period considerably older than the late date given to it as a Parthian palace, for we fortunately have records of perpendicular cuts made in or next to the palace by the different expeditions. To these we shall now turn.

Dr. Peters, in command of the first two campaigns, 1889-90, took his measurements from the surface of the mound — which he found to be 24 m. above the level of the plain — downward. Dr. Haynes, during the third campaign in 1893-95, sinking a perpendicular shaft near to the outer wall of the palace for the

purpose, reached virgin soil 24 feet below the plain level, and from this level he measured his strata. We, in 1899-1900, took our own measures from the level of the court of the palace upward, since we did not concern ourselves for the time with the underlying strata. All these systems of measurement seem confusing at first, but if we reduce them all to feet, for convenience, and draw them all out to the same scale side by side, we reach some very tangible results. This has been done

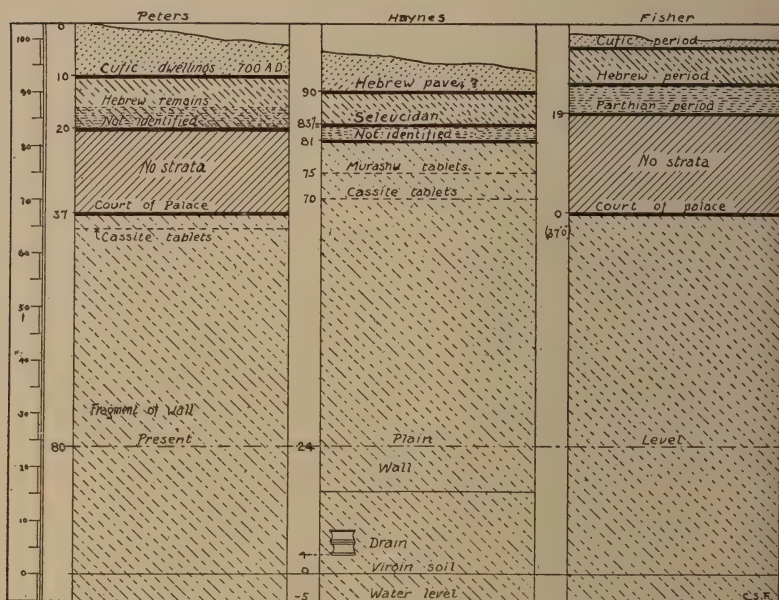


FIGURE 2. — COMPARATIVE DIAGRAM OF STRATA OVERLYING THE PALACE.

in the diagram, Fig. 2, in which the first division gives the results of Dr. Peters, the second, those of Dr. Haynes, and the third, my own.

Dr. Peters found a pavement 10 feet below the surface, which, from the numerous Cufic coins and other objects he found associated with it, he could safely say represented the Cufic stratum, *c.* 700 A.D. Ten feet below this he found a second pavement, to which he was unable to assign any name or date. Now, between these two he found a stratum full of

inscribed Hebrew bowls, obviously not belonging to the Cufic period above and certainly not to the pavement below them. As I shall show later, this was the result of one of those inevitable accidents common in excavating; for it really was a third stratum, of which he did not find a pavement because at the point he sank his trench there was a road or unpaved court of a house, so that the stratum was represented solely by its pottery. The level of the palace was 17 feet below the lower of the two pavements, and there was no trace of any further walls or buildings in all this depth. Just below the level of the building he came across a large collection of Cassite tablets, numbering nearly 250, in fine condition, and showing by this and by their being unscattered and of the same period that their position represented approximately the true depth of the Cassite era, *c.* 1280 B.C.

Dr. Haynes found the remains of *three* pavements in a space of about 9 feet, corresponding to the 10 feet of Dr. Peters's pavements. He was, however, uncertain about the dating of any of them. The upper one he supposed to be Hebrew, the next, Seleucidan, and the lowest he did not attempt to date at all. As his shaft was outside the limits of the palace, he naturally did not find any portion of its pavement, but he did find one very important thing. Six feet below his third pavement he came across a collection of fine tablets belonging to one period and *in situ*. This collection is the one that has since become famous as the archives of the Murashû Sons, a business firm of Nippur about 450 B.C. Another collection of Cassite tablets nearly as extensive as those found in 1890 was found 5 feet below these.

In the last campaign (1899-1900) I found three pavements just as the others had discovered. Seventeen feet above the palace level was a pavement which I have called Parthian. A Hebrew pavement was 5 feet above this, and yet a third, the Cufic, another 7 feet above the Hebrew one. Between the lowest or Parthian and the palace levels there was no trace of walls or building construction except here and there a well,

drain, or watercourse. It is evident at once that the three pavements disclosed by Dr. Peters, Dr. Haynes, and myself, in excavations made at widely different times, quite independently, and in separate trenches or cuts near the summit of hill I, containing the palace, must represent the same three periods. Taking into account the convolutions of the mounds I have already spoken of, we cannot consider the variation in the figures given for the space between the three pavements as prejudicial to this view. Dr. Peters makes this distance about 10 feet, Haynes, 9 feet, and where I measured, it was 12 feet. Discarding Haynes's nomenclature, we can now say that the upper stratum represents the Cufic period, *c.* 700 A.D.; the second, the Hebrew, from *c.* 200 A.D.; the third, the Parthian, from *c.* 200 B.C. onward.

The name Parthian I assign to this layer mainly because of the character of the burials found below it. During the first two campaigns Dr. Peters unearthed over the palace a large number of tombs and burials, of which I have no personal knowledge, but which Dr. Peters says as a rule bore the unmistakable evidences of Parthian origin. In our own work we opened up some sixty burials of the slipper and other types. Dr. Hilprecht assigns twenty of this number to the Seleucid and Parthian eras, from 300 B.C. to 300 A.D. Not only was not a single burial out of all the sixty found *below* the palace, but the lowest was more than a foot above the highest point of its pavement. As we cannot say the bodies were buried from a level *below* them, it is certain that they belong to a level *above* where they were found. Another important point is that the lowest of the slipper coffins found display distinct Greek influence in their ornament, some having heads with wavy hair, and others figures playing upon single and double pipes.¹ Still others had whole figures with more grace in their composition than was usually displayed in Mesopotamian work. These burials filled the 17 to 19 feet between the third period and

¹ These belong to the short period of Greek occupation after the conquest and also to the Seleucid era immediately following it.

the level of the palace. Since it is improbable that burials were sunk as much as 12 to 16 feet below their own level, we must conclude that for a long period of years the site of the palace was not used for dwellings but as a graveyard, the coffins being sunk through the *débris* of the more ancient building below, whose presence was not known to the inhabitants at that date. Proof of this is the fact that in several instances the slippers were placed diagonally through or partly buried in a wall, showing that the presence of the wall was unsuspected when the shaft was dug. This burial period extended from a time after the palace had fallen into ruin up to the time of the building of the next pavement above it. Burials still continued after that, but took place apparently from the rooms and courts of the later buildings themselves, while they were still occupied, a custom still prevalent in eastern cities.

We can now note the facts disclosed by the strata. First, we observe that there were at the end of the history of Nippur three periods succeeding each other comparatively swiftly, and covering a space of about seven to eight hundred years. The site during this time was occupied continuously, as we may infer from the slow accumulation of *débris*, which here on the summit of the mound would not be allowed to fill up the streets to the degree it would in the earlier periods of the city, when the level was still horizontal. Then the inhabitants had to leave the rubbish of their daily life lying in the corners and in the streets, but in the later times it was carried to some unoccupied edge of the mound, and dumped in a common rubbish heap.

Preceding this was the period when the site was not occupied by dwellings, but given up entirely to the disposal of the dead. Just how long this lasted we cannot say, but from the oldest of the burials it would appear to be not earlier than the Greek conquest in 330 B.C. We must, then, account for the great accumulation of *débris* under which the palace lies buried by a still longer period of time, during which the mounds of Nippur were abandoned entirely.

The walls in the western corner of the palace still have a height of 9 to 10 feet, in almost perfect preservation. This condition would not be possible if the building had not lain a long while in ruins and was slowly covered up by its own débris. We should find the upper portions of the walls torn down, the whole of them levelled off for the walls of the new building to rest upon, and the old materials reused for building purposes, just as we find it to be the case in other parts of Nippur, where the destruction of one building was succeeded immediately by another occupancy. The other corners of the building are not so well preserved, however, and the explanation of this I have been fortunate enough to find in the structure of the walls still *in situ*. From the time that the building was first uncovered it has been accepted as a fact that the palace was destroyed by fire. The crude clay of the walls was baked red, the plastering had become exceedingly friable as a result of fire, and in several of the rooms there were traces of burnt grain. This view of the case was accepted fully by me as the correct one until the complete uncovering of the rooms in the west corner disclosed some curious additional evidence. To understand this, one must know that all the main walls inside and outside of the palace were constructed of unbaked bricks about 12 inches square and 5 inches thick. Over these was applied a coating of mud plastering. All the columns and antae in the building were of baked brick covered with lime mortar. Now all over the palace these inside walls are reddened to a depth of from 1 to 5 inches, leaving the inside still the grayish brown of the original clay (see Fig. 3, A). This is the same in the west corner, but with a curious addition. Here the walls have two distinct layers, so to speak, of red. The inner part is unbaked, with a layer of reddish, crumbly clay on each side. Then there is a second layer of good fresh clay on each side, with a final reddish layer outside, as shown in Fig. 3, B. This at once proved to me that we had to consider two destructions by fire and not only one. Before this I had been considerably puzzled by the presence of

a large quantity of burnt grain found in the room marked XXI on the plan (PLATE XIV). It could not have been stored there while the palace was occupied, because room XXI appeared to be the only outlet for all the rooms to the south of it, as well as the key to the system of communication between the eastern and western halves of the palace. Further excavation fully established the importance of this room beyond any doubt. How, then, are we to account for its being so full of burnt grain?

The discovery of the evidences of a double destruction supplied the clew. In the rooms in the western corner only does this double trace occur; in all the others there is the simple evidence of but one fire. Further searching disclosed the remains of a doorway cut in the main northwest wall at the point *a* in room XXXIX. The sill of this

was considerably above the former floor of the room, and on a level with the top of the hearth in the adjoining room (XXXV). It was clear that after the first or great fire the western part was rebuilt, either at that time or soon afterward, and used as a small dwelling, with several of the rooms, especially XXI, which was now at the rear of the new house and hence the most secluded, set apart as storerooms. Naturally, the old walls, where damaged by the flames, were reënforced and patched, restored to the required height, and then covered with a new roof. Then this in its turn was destroyed by fire, and it was at this time that the grain was burnt. Just as we might expect, this burnt grain was found only in the rooms in

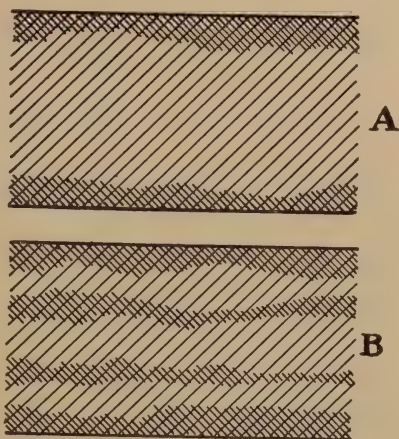


FIGURE 3. — EFFECT OF BURNING ON THE WALLS.

These diagrams show the appearance of the walls in the main part of the palace (A), and those in the rebuilt western corner (B). Cross-hatching indicates red baking.

this west corner, as indicated by the dotted patches on the general plan (PLATE XIV).

These two periods of the building must really be considered as one, and these differences do not affect our chronology at all. This hypothesis accounts for the better preservation and height of the remaining walls of the one part of the palace as compared to the others. The east side of the building, and especially the east angle, has suffered most from the weather, being exposed to the washings of a gully which evidently owes its origin to a surface conduit which formerly drained the great court on this side.

We can surely allow for at least so long a period between the destruction of the palace and the third pavement as intervened between that and the two superimposed strata. On the other hand, we have the building resting directly upon the remains of the Cassite period, *c.* 1200 B.C. Eight hundred years before the Parthian era would give us an outside date of 1000 B.C., so that we must place the construction of the palace somewhere between these two dates, *i.e.* between 1200 B.C. and 1000 B.C. This corresponds to the date of the latter end of the Mycenaean age in Greece, and we have abundant evidence, not only from smaller objects from various parts of Nippur, but in the detail of the palace, that there was in existence there at that time an influence in art too utterly un-Babylonian and too closely Mycenaean to allow any room for doubt as to whom we are to thank for the erection of the interesting edifice.

As I have said, no pottery or other small objects that would enable us to date more exactly came from the palace itself. Let us, therefore, turn at once to a review of some of the objects from the other parts of the site. Among the many, space allows but a few to be illustrated. There are figurines of men and women in Greek costume; warriors; musicians; a stele depicting Orpheus playing upon his lyre and attracting round him a group of various animals with all their limbs admirably drawn; steles of religious scenes belonging to the

peculiar Mycenaean worship; and a host of others covering nearly every occupation.

Some of these belong to the last Greek period of occupation at Nippur, during the ten years following the conquest by Alexander in 330 B.C., but the difference in type readily distinguishes these from the older ones. These examples of the later period will be given first.¹

Fig. 4 is an exquisitely modelled little group of lovers in terra-cotta. The surface is worn smooth in several places and portions of the lower limbs are broken away, but the graceful folds of the drapery and the well-modelled anatomy showing through it are well preserved. It is one of the best examples of the later pure Greek period at Nippur. In contrast with the following specimens I give in Fig. 5 a fine example of true Babylonian work. It shows, despite a certain character in the expression of the face, the fast hold conventionalism had upon the artist of that time. His work was forced into certain established channels, his subjects were limited, and his treatment of them even more circumscribed. This shows itself here in the prim, straight lines of the hair and beard, which, while certainly copied from the then prevailing fashion, are



FIGURE 4.—A PAIR OF LOVERS.
TERRA-COTTA FROM NIPPUR
($\frac{1}{2}$: HEIGHT, 5.25 INCHES).
LATE GREEK PERIOD.

¹ My object in introducing here a description of the objects belonging to the later Greek period is not only to show their marked difference from the Babylonian type, but more especially to contrast them with the objects of the first Greek or Mycenaean period described farther on. These latter, while not found in the palace itself, definitely establish the existence at Nippur of a Mycenaean stratum. Since the palace displays the same characteristic influence architecturally as do these objects artistically, we can consider them together.

drawn without any attempt at a natural rendering of them. Beside this place the little head in Fig. 6. While it is not so



FIGURE 5. — BABYLONIAN TYPE OF HEAD FROM NIPPUR ($\frac{1}{2}$).

good a type of the Greek period as the other is of the Babylonian period, it shows great superiority along two lines — individuality of treatment and faithful rendering of detail. Another fine little figurine is given in Fig. 7. The head is missing and the rest of the figure is chipped. The figure is that of a Greek youth with his chlamys flung over one shoulder. The right arm is broken off, but apparently hung straight down at the side. The left arm rests upon his hip, and over it is flung the end of the drapery. On this side stands an animal, the details of whose head are not quite distinct.

The most noticeable thing in all Babylonian work is the symbolism embodied in some way in every piece of sculpture or plastic work. Figures of Bel and Beltis predominate. Bel, with his symbols of overlordship clasped tightly in his hands, and Beltis, emblematic of life and reproduction, holding a child in her arms and sometimes nursing it, are found everywhere. In these the sexual parts are always strongly emphasized, the lower part of the abdomen being usually made in the shape of a triangle and deeply marked (Fig. 8). But there is never any attempt to infuse life into the pose of the figure, and with the exception of the faces in



FIGURE 6. — GREEK HEAD. TERRACOTTA FROM NIPPUR ($\frac{1}{2}$).

some such unusual piece as shown in Fig. 5, the whole series is most monotonous. Now we find just such figurines occurring at Tiryns and other Mycenaean points, showing all the characteristics of this crude Babylonian art and lacking in the idealism later infused by the Greeks into their work; and we can at once accept this as a proof of a close relationship between the two countries, and an interchange or commingling of their workmanship at a time when each country was making and holding to its own ideals. The crude Babylonian type never left a permanent imprint on the soil of Greece, but, on the contrary, we find that the influences planted at Nip-

pur and at other sites, as the further in-

vestigation in Babylonia will show, held their own for a considerable period after their originators had been swept away, and now and again down through the succeeding régimes we find them cropping out. All the latter work is merely a copying of such Greek work as remained to them.

We now come to some examples of the older Greek period. The objects of this series were found, as were the others, scattered all over the mounds at a depth much below the later Greek work, and belonging to the same level as the palace. One of

the most interesting examples is shown in Fig. 9. It is in stone and apparently belongs to an entire figure of which the

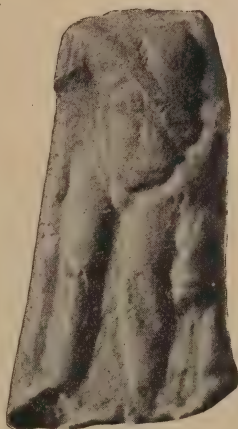


FIGURE 7.—GREEK YOUTH. TERRA-COTTA FROM NIPPUR ($\frac{1}{2}$: HEIGHT, 3.90 INCHES).



FIGURE 8.—CHARACTERISTIC FIGURE OF BELTIS ($\frac{1}{2}$: HEIGHT, 4.70 INCHES).

rest has unfortunately not been found. The head-band, the wave-scroll ornament on the cap, and the beard are characteristic of Mycenaean work. From a burial of this period comes the gold face-mask identical with those discovered at Mycenae (Fig. 10). We cannot hope to find many such specimens, because Nippur, unlike the great capital city of the race,

could not have been much of a settlement in either of the Greek periods and would therefore have only a small number of people sufficiently important to be worthy of elaborate burial. The evidence of this one is not to be disregarded, however, for we would not find it used by a people who did not share in the customs associated with it.



FIGURE 9.—HEAD OF MYCENAEAN WARRIOR IN STONE.
FROM NIPPUR.

Perhaps the most remarkable object found is that in Figs. 11 and 13. Here is the exact representation of the Mycenaean Tree and Pillar cult on a small terra-cotta stele. Figure 11 is a photograph from a cast now in our Museum at Philadelphia, the original being kept at Constantinople, and Fig. 12 gives a similar scene on a lentoid gem from Mycenae. Figure 13 was drawn directly from the cast in Fig. 11, and gives more of the detail

not so plainly discernible in the cut from the photograph. We cannot for an instant suppose that these objects, which are but selections from a great number of similar finds, are accidental, or are perhaps objects imported as curios from Greece into Babylonia. They are found, not in any one isolated spot, but in private houses, in graves, in public places, showing that they were in

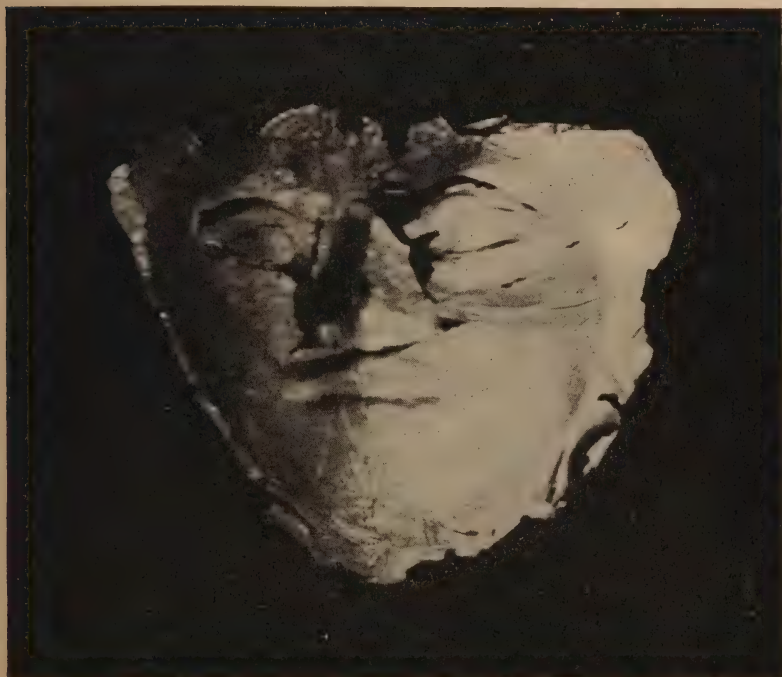


FIGURE 10. — GOLD FACE-MASK FROM NIPPUR.

common use and held in some considerable degree of estimation by the inhabitants, who would not have made use of them unless they were familiar with them and understood their value and real significance.

THE PALACE

The palace is practically square in plan. The northwest and southwest sides, which are the only ones remaining in their entirety, are respectively 172 feet $2\frac{1}{2}$ inches and 169 feet $\frac{1}{4}$ inch

long. The diagonal of the building is $19^{\circ} 30'$ east of north, being so placed to take full advantage of the warmth of the



FIGURE 11.—SACRED TREE AND WILD GOATS.
TERRA-COTTA STELE FROM NIPPUR ($\frac{2}{3}$: SIZE,
3.50 INCHES BY 2.95 INCHES).

sun in winter and the cooling breezes in summer, which would naturally have a greater effect when two instead of only one side was turned toward them.

The angle between these two walls is an exact right angle, and while it was evidently the intention of the builders to make all the angles so, a slight distortion of the sides of the central court makes the plan slightly irregular. The axis of the northwest row of columns is parallel with the northwest wall, but the axis of the southwest row makes an angle of $90^{\circ} 10'$ with it, and this in turn is at an angle of $89^{\circ} 30'$ with the southeast row, with the result that the rooms in the south corner are not rectangular. The outer wall on the southeast side follows the corresponding line of the court, and so apparently did the fourth side parallel the northeast side of the court, although we have but a fragment of it remaining.

The outer walls on three sides are decorated with shallow pilasters, while the fourth side, toward the canal, is much

long.

The angle between these two walls is an exact right angle, and while it was evidently the intention of the builders to make all the angles so, a slight distortion of the sides of the central court makes the plan slightly irregular. The axis of the northwest row of col-



FIGURE 12.—SACRED TREE AND
WILD GOATS ON A LENTOID
GEM FROM MYCENAE ($\frac{2}{3}$).

(From the *Journ. Hellen. Stud.*
XXI, p. 154.)

heavier and simpler in design, in accordance with the character of a retaining wall to the terrace which existed on this side, as is shown by the remains of buildings of the same period as the palace on a much lower level at the foot of the wall, and nearly against it.

The plan can readily be divided into two parts (PLATE XIV). The eastern half, the *andronitis*, grouped on the axis A, is



FIGURE 13. — FULL-SIZE DRAWING OF THE STELE SHOWN IN FIGURE 11.

BY HERMANN FABER.

marked by a general spaciousness and appearance of publicity and state. Its court, vestibule, and hall are large and well lighted. On the contrary, the effect of the western part (G) is privacy and domesticity. There is a noticeable absence of decoration and display; the rooms are smaller and more compact. It is impossible that these two parts are separate houses, for not only have they but one common entrance, at I, but the

two are closely connected by the passage XVII. The fact that this latter passage is protected by strong doors at either end does not argue against this view, for it was an arrangement by which the inner part of the house could be kept more private during the presence of strangers in the public apartments.

The single entrance I have mentioned is on the northwest side. Fortunately, it was so completely uninjured by the ruin of the rest of the palace that we could secure a very correct idea of it. The doorway is 5 feet 6 inches wide, and placed in the centre of one of the decorative pilasters. Three broad, low steps, constructed of baked brick, led up to it (Fig. 14). The

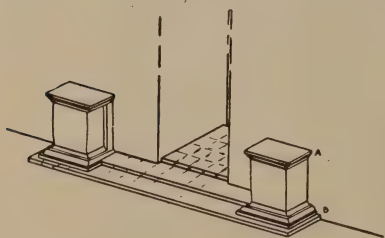


FIGURE 14.—PERSPECTIVE OF ENTRANCE OF PALACE.

lowest of these forms a base for the entire feature, and the second, by returning around the fronts of the two pedestals placed at each side of the opening, forms a plinth block for the mouldings composing their bases. The pedestals are carefully constructed of baked brick,

and their rough faces finished with a layer of fine stucco. The face of each, instead of being perpendicular, has a graceful curve outward from the base. Both the mouldings of the bases and caps have the oval form characteristic of the Greek work and not the simpler semicircular contour common to the Roman curves (see Fig. 15). The whole has a height of over 4 feet, but the wall above is so damaged that it is impossible to determine what rested on the pedestals. The door admits to the general vestibule (I) of the palace, from which two doors on the left and right sides of the room lead to the *andronitis* and *gynaecoonitis* respectively. The doors in the vestibule and the two anterooms (II and XVIII) adjoining it are so placed that a view of the interior of the palace could not be obtained by any one standing outside in the street, or even in the outer vestibule itself.

We will first describe the apartments of the *andronitis*. Passing through the special anteroom (II), we reach a sort of large loggia (III) corresponding to the *prothyron* in the earlier types of Greek house. Its whole southeastern side is open to the great court (IV), the main wall of which is carried over the opening on two elliptical columns *in antis*. There is no pavement in this loggia, nor, indeed, in any of the rooms of the palace, the floors being composed of clay well worked down and rolled. Edges of steps where most wear would come were protected by curbs or edgings of baked brick one or more rows in width, such as we find here running under the columns along the low step which leads to the level of the colonnade around the great court. This peristyle has been considerably damaged by the construction within its limits of burial vaults in later times. In plan, three of the sides are well preserved, but in elevation the columns and corner piers remain standing only from two to four feet. A portion of the foundation belonging to a column on the fourth side determines the position of that side, and shows that the colonnade extended around this side as well and had the same width as on the other sides. This floor was also unpaved, except for a curb of two rows of bricks with a space between them running between the columns. On the southeast side there were four rows of bricks laid closely together. This curbing was continuous under the columns and was but one course in thickness. Below each column was a foundation of baked brick 4 feet square and extending 3 feet below the level of the colonnade. By

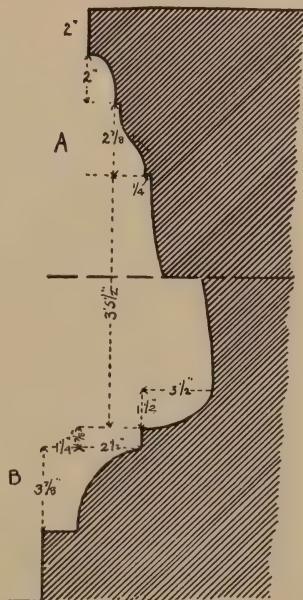


FIGURE 15.—DETAILS OF PERSPECTIVE OF ENTRANCE OF PALACE. (See Fig. 14.)

a study of all the lower portions of columns left standing, and from the two fallen ones at *a* and *b* on the plan, of which *a* was complete, I have ascertained the original height and system of construction of the columns. The diameter at the base was 2 feet 9 inches, and the height about 13 feet 6 inches, a ratio of base to height of approximately 1 : 5. There were fifty courses of bricks in each column, exclusive of the capital, and for the first seventeen of these the sides were perpendicular. Above this an entasis gradually lessened the diameter until at the top course it was only 2 feet 2½ inches, or nearly in the ratio 3 : 4 as compared to the base. These are the proportions of the Doric column of the earlier type, and, as we shall see later, the columns were crowned with the unmistakable Doric cap having the earlier form of echinus.¹

The builders were accustomed to using stone, so that when they were forced to use clay for the same purpose they had to display considerable ingenuity in order to obtain with it columns of the desired form and size. Having decided from the rest of the building the height of column required, their hereditary instincts of proportion compelled them to have a certain diameter at its base and top. They moulded the clay into the shape of sectors of a circle and baked them, making them all of a common size to economize time and labor (Fig. 16). These they used to construct their columns. It was puzzling to find that the lower courses of the columns contained not only a certain number of these sectors, but always had a small extra fragment of brick inserted, with the apparent object of giving a greater diameter to the column, but that this arrangement was not uniform throughout the entire column. For instance, in

¹ These columns are not of the form exclusively considered as Mycenaean. It is now becoming more and more widely recognized that the Doric type is not widely different from the Mycenaean, but has so many points in common with it that we can now say it owes its origin to it. Hence at such a late date in Mycenaean art as the years of the emigration of part of the Mycenaean people, slightly subsequent to which I place the erection of our palace, it is not surprising to find that the columns had already reached the somewhat crude but unmistakable Doric form which is found in the palace at Nippur.

the lower seventeen courses there were six sectors with a wedge (A on PLATE XV). At the top there were five sectors without a wedge. A study of the courses between showed that the entasis was obtained by gradually decreasing the size of the wedge above the seventeenth course until just six sectors completed the required diameter. Then five sectors with decreasing wedges were used until at the top there were, as I have said,



FIGURE 16. — SECTOR FROM A COLUMN OF THE PALACE.

the five single sectors (B on PLATE XV). It is evident that the builders desired to have the top built as solidly as possible to make a sound base on which to support the girders and beams of the roof, whose direct weight came at that point. If they had made the sectors large enough to form the bottom diameter without the use of wedges, they would have been unable to form the top courses without using a specially large wedge, thus defeating their purpose. So the sectors were designed to make a good joint at the top, and the courses at the bottom,

where the mass of the shaft above made it unnecessary to have such careful jointing, were left to take care of themselves. The shape of the sectors resulted in a large space being left in the centre of the column which was filled with fragments of broken bricks. The column was trimmed off with some sharp tool and then finished with a coat of stucco. A brick with the stucco still in place is shown in Fig. 17, *b*.

The construction of the capital is equally interesting. It was composed of bricks cut on their edges to form the contours of the Doric cap. These were not moulded, but were cut after the bricks had been baked (see Fig. 17, *a*). One series of bricks



FIGURE 17. — (*a*) BRICK CONTAINING FILLETS OF CAPITAL; (*b*) BRICK SHOWING LINE OF STUCCO FINISH.

contained the fillets which joined the necking of the column with the echinus above, and other bricks had the outline of this echinus. Of the fillet bricks we found two distinct shapes, each with exactly the same moulding, showing that they formed part of the same structure. One of these was sector-shaped like those used in the body of the column, while the other appeared to have been cut from a half square brick. Both of these shapes with full dimensions are given in Fig. 18. I found that when a pair of them were placed as shown in this figure, their combined ornamented edges formed part of the circumference of a circle with a diameter corresponding to that of the top of the shaft, with the addition of a slight projection

necessary to cover the edge of the stucco with which the rough sides of the latter were coated. At *c* (PLATE XV) is shown the whole arrangement of this capital. The echinus, of which we found but one unbroken specimen, was composed wholly of sector-shaped bricks. The absence of any bricks forming the square abacus leads me to believe that this was not constructed of bricks at all, but was most likely a large, thick piece of planking on which the girders of the colonnade roof rested

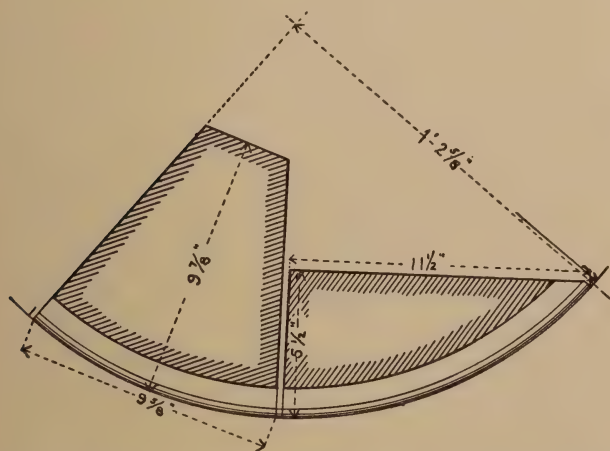


FIGURE 18. — SHAPE AND ARRANGEMENT OF FILLET BRICKS IN CAPITAL.

and to which they could be securely fastened. On the left of PLATE XV is the column restored with a suggestion of the system of roofing, based upon that employed in the country at the present time, evidently a survival from earlier periods. On the right is a full-size detail of the capital, showing the fillets, echinus, and abacus with their connection to the main part of the shaft and its stucco.

While the width of the colonnade was uniform on three of its sides, on the southeast side, in front of the door to the *prodomos*, it widened out. Here there was a broad pavement with the base of a large round structure (*c*) at one end. This was certainly the altar which we find in every Greek house, situated somewhere in the main court near its principal axis.

There is nothing left of the wall between the great court and the *prodomos* (v), and we can ascertain its proportions only from the extent of the pavement forming the step to the door. Charred fragments of the roof beams were found here and also around the edges of the colonnade. Naturally the centre of the court was open to the sky in order to supply light and air to the rooms around it.

The discovery of the threshold (*f*) of the *megaron* (vi) was as important as the finding of the front entrance. Three steps lead up to a door which is over 10 feet wide. At either side of the top step were door-sockets, and in the débris and ashes lying there were the remains of the bolts and bars used on the door. These are significant from the fact that they were entirely of iron while all the rest of the metal work in the palace was of bronze. This use of iron on the principal doorway of the palace is intelligible when we remember that at the period the palace was built iron was rarer and more valuable than bronze, the metal commonly used for weapons and implements. Iron was selected for the ornamentation of the chief door, just as silver or bronze would be in our own day. The whole of the front wall of the *megaron* is intact, or was before the portion shown by shaded lines had been removed by a trench during the early days of excavation. The rest of the walls are fragmentary. A portion of the rear outer wall gives us the depth of the room and parts of the two side walls give us the length. It was some 37 feet by 48 feet, a nobler hall than that at Tiryns. No traces of support for the roof were found, but I have indicated four columns grouped in the centre supporting an opening clerestory after the system used at Tiryns. This gave exit to the smoke from the low hearth which must have been here and also admitted the light which could not have come very well from the outer court through the dark *prodomos*. Various smaller rooms were grouped around the great court. Of these, two (vii and viii) were almost complete. Room ix, having its only outlet through the *prothyron* (iii), was evidently a small guard room commanding the entrance opposite. Rooms x

and XI were, with VII and VIII, sleeping rooms for the inhabitants. At the east end of the *prodomos* (V) a low step indicated a door to a room on a lower level than the great hall, and used with the several other restored rooms here served the same purpose. Figure 1 (on p. 404) is a view across the great court through the door of the *megaron*, in the foreground. Beyond, on the right, is the base of the altar with the columns of the peristyle behind it.

Near the south corner of the court there was a step with a door which opened on a long passage (XVII) connecting the main court with a small vestibule (XXI). The two door-sockets at either end of this passage enabled it to be securely closed at will against intrusion by persons in the great court. The vestibule (XXI) could be reached from the front door through the winding passages (XIX) by first entering the women's vestibule (XVIII) and then following the passage (XIX and XX). The smaller corridor (XX) was used as an anteroom to the group of slaves' rooms in the west part of the palace (XXXV to XXXIX), and kept the regular women's quarters apart from them.

We find, again, in vestibule XXI an arrangement of doors to prevent the curious from observing what went on in the women's court (XXII) like that employed at the front entrance. This court, as we have said, was much smaller and simpler than the main one. There is no colonnade, but only the open porch on the south side screening the women's hall behind it (XXIV). A flight of steps led up to the door of the latter, but no door sockets were found on its threshold. This whole group of court, porch, and hall is parallel to the similar group on the men's side and is arranged in the same order. To the east of the small court and connected with it by a corridor (XXV) were two rooms which deserve special mention on account of their importance. They were no doubt the private rooms of the owner. The inner apartment (XXVII) was the bedchamber and the large outer hall (XXVI) used for entertainment or receiving personal visits. The outer room was

on a lower level than the corridor or the inner room, a step leading down into it from the former and up from it into the latter. At its west end there was a single fragmentary column which probably supported a gallery over the end. On the opposite side of the corridor were two long storerooms (XXVIII and XXIX). Along the western side of the court were two more good-sized rooms, from one of which (XXX) there was a strong door leading to a small dark room (XXXI) which was the treasure room of the palace.

One of the most interesting features of this side of the building was the bathroom (XXXIV). This opened from the west corner of the court near the door leading to the passage to the men's apartments.¹ Its floor was tiled with baked brick, and there was a low rim around the sides formed by laying a row of bricks on edge. Both floor and rim were laid in bitumen, instead of mortar, and thickly smeared with it. From all sides of the room the floor sloped to a point in the centre opposite one jamb of the door, where a small round hole allowed the water to escape into a vertical drain made of the common round pottery sections. This was still seventeen feet deep.

The whole of the west corner was given up to a series of rooms belonging to a distinct group having its outlet through room XX. This was the regular working department of the palace. Room XXXV was a kitchen, with a raised hearth (*a*) in one corner, constructed of unbaked brick with a single course of baked brick on top. At one end was a ledge and in the middle was a spit composed of two pieces of stone, the upper one hollowed out, and having two grooves cut in opposite sides in which the metal spit turned. Two water jars stood leaning against the sides of the hearth.

PLATE XVI gives three sections through the entire palace as it was found. The first is on the axis (*a*) of the *andronitis*. The *prothyron* is at the extreme left. Next is the colonnade around the court, the missing fourth side of which is indicated by dotted lines. In the centre is the pavement before the door

¹ At Tiryns the bathroom was situated on the men's side of the palace.

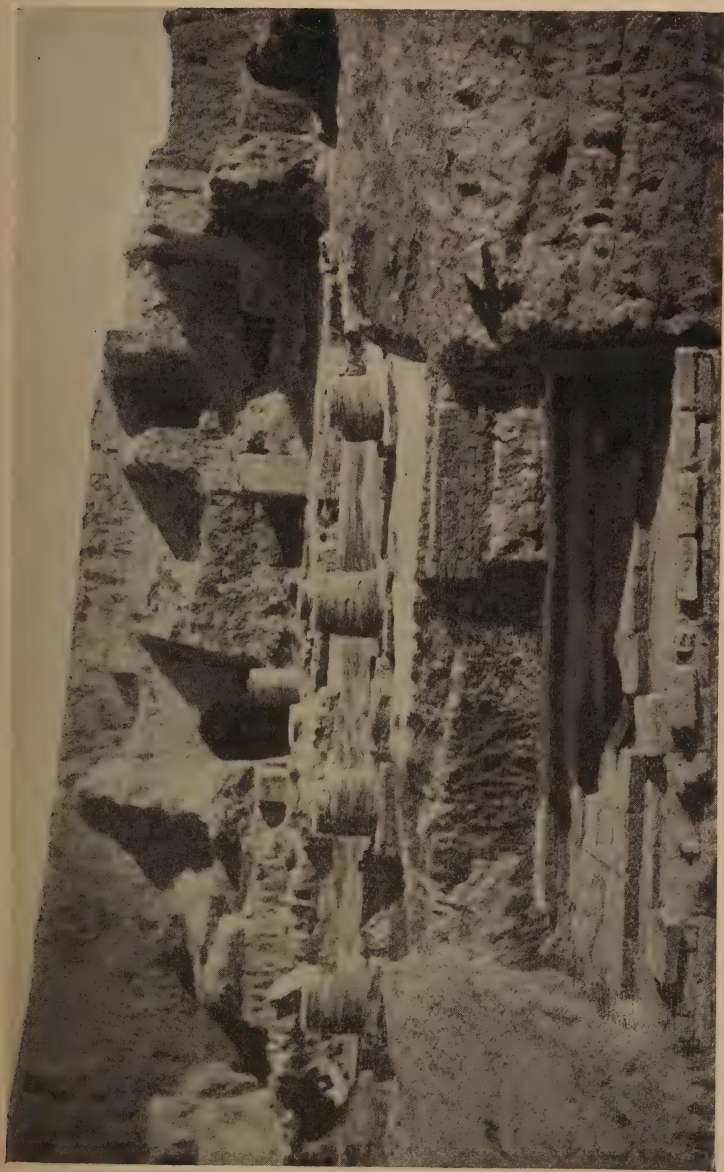


FIGURE 19. — VIEW, LOOKING NORTHWEST, THROUGH THE DOOR OF THE MEGARON ACROSS THE GREAT COURT.

of the *prodomos*, the floor of which has been removed by a trench. Beyond this are the steps and threshold of the *megaron*. The next section is parallel to the former one on the axis (*g*) of the *gynaeconitis*. Nearly in the centre is the bath, with the small court to the right of it and the kitchen a little to the left. The third section is through the centre of the great court perpendicular to the first one.

It is interesting to place side by side the two main groups of rooms of Tiryns and Nippur, as I have done in Fig. 20, both being drawn to the same scale. That of Nippur is restored according to the indications on the general plan in PLATE XIV. We find the same arrangement of court, vestibule, and hall in both plans. At Tiryns the sides of the court have isolated colonnades which, in the case of Nippur, have been grouped together continuously. The *aitthousa*, complete at Tiryns, still shows its position in our palace in the widening of the colonnade on the fourth side. The *prodomos* is identical even to the door on the left side. The *megaron* at Nippur is much larger and is placed with its long side perpendicular to the general axis, instead of coinciding with it, but it is in all respects the same. From both courts a passage leads off to the right toward the women's apartments, and in each case, these, although it is not included on these plans, have their long, tortuous connection with the single main entrance. All this goes to prove that Tiryns is not two distinct palaces, as Professor Percy Gardner has attempted to demonstrate, but is one palace divided into two sections, one for the men and for public use and the other the domestic or private part, as was originally claimed by Dr. Dörpfeld and others. The two parts were closely connected by the passage, but could by means of the doors in that passage be kept quite separate from each other.

The discovery of this interesting palace at Nippur, so closely following in its details the more widely known one found at Tiryns, gives us additional proof of the wonderful extent of the civilization which scholars, for want of a more exact name, have designated as Mycenaean. Further excavations at Nippur

and at other Mesopotamian sites may throw light on the dark question of the authors of this civilization, but I do not believe that such will be the case. Instead, I believe we shall find that this part of the nearer East was the last influenced by the Mycenaean culture and this was due to its being the place

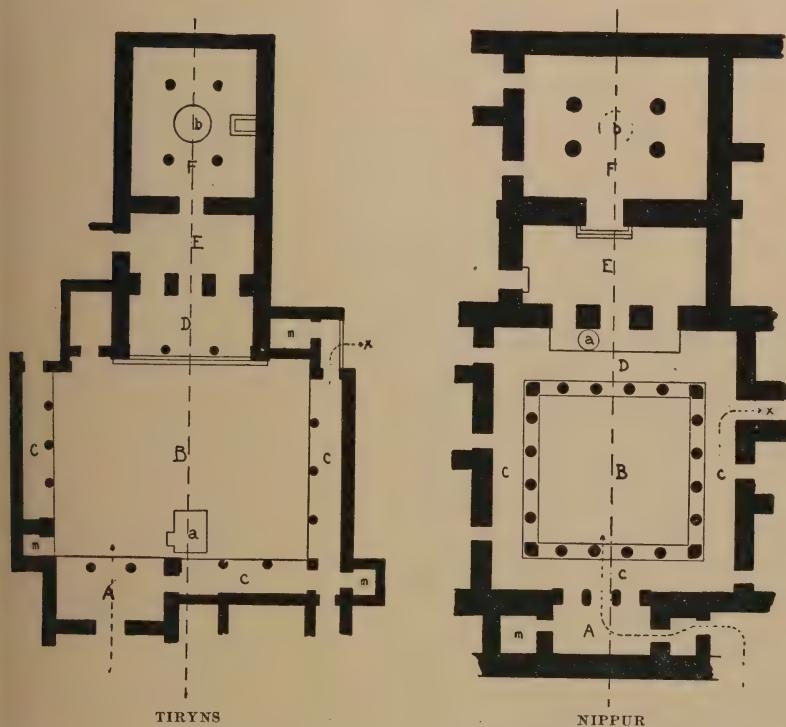
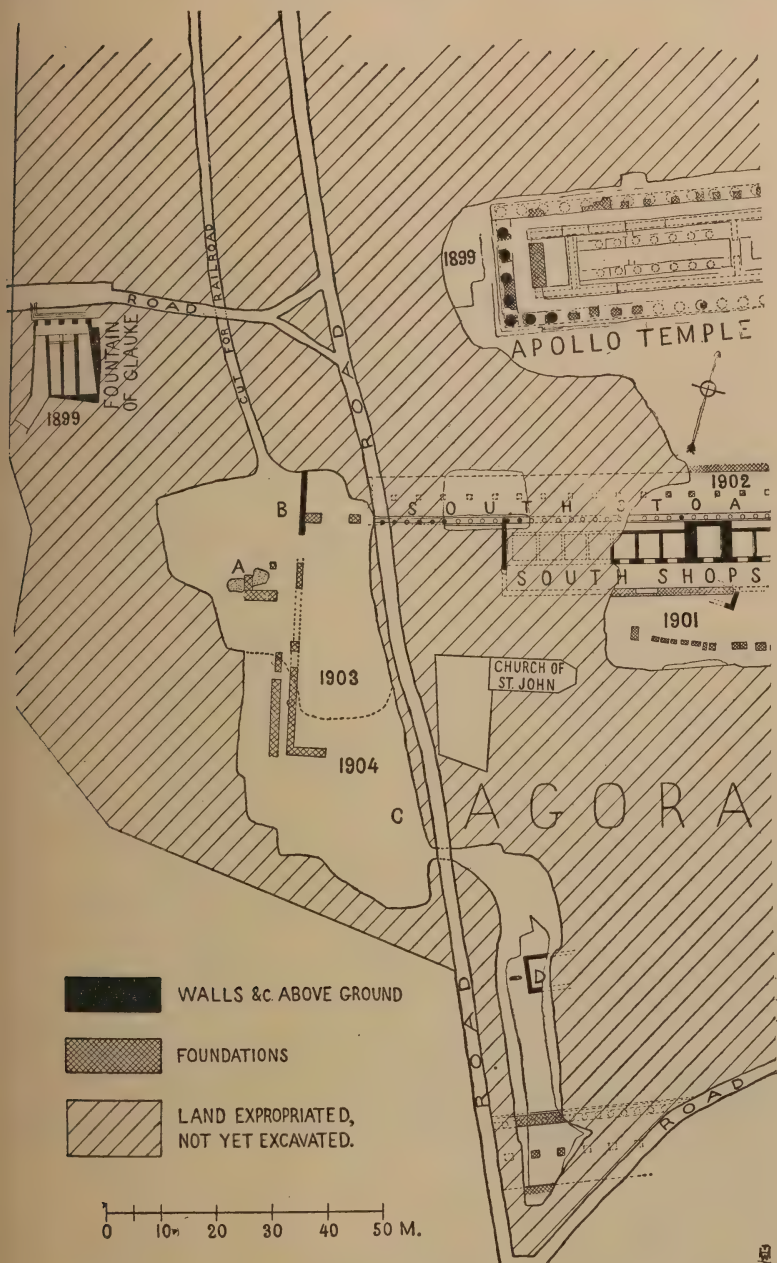


FIGURE 20. — COMPARATIVE PLANS OF THE PALACES OF TIRYNS AND NIPPUR.
A, Prothyron; B, Court; C, Colonnades; D, Aithousa; E, Prodomos; F, Megaron;
a, Altar; b, Hearth; m, Guard-rooms; x, Direction of Women's Apartments.

to which some Mycenaeans migrated after their expulsion from the mainland of Europe by the Dorians. Already we have some slight reasons for this belief in the curious gap in the otherwise very full chronology of the Babylonian and Assyrian empires. From *c.* 1100 B.C. to 950 B.C. we have a period full of unrest, of vague and mysterious mentions of strange races invading the land, who are called in one part of the country by

one name, and in other parts by another, and finally the total absence of records of the descendants of the older dynasties. Not until the later date do we find them reasserting themselves and reviving their ancient kingdoms with some degree of strength and prosperity. These questions cover a great field and cannot be adequately treated in the space of a short article. I hope in a future work to take up the whole subject in connection with a more detailed account of the palace that is dealt with in this paper.

CLARENCE S. FISHER.



SKETCH PLAN OF THE EXCAVATIONS AT CORINTH IN 1904



TORSO OF A KRIOPHOROS FROM CORINTH

EXCAVATIONS AT CORINTH IN 1904

PRELIMINARY REPORT

[PLATES XVII, XVIII]

THE excavations on the site of ancient Corinth by the American School of Classical Studies at Athens were resumed the middle of May and were continued until funds were exhausted at the end of June.

Starting where work was abruptly stopped in 1903 (*Am. J. Arch.* VII, 1903, p. 350), an area of about 1000 sq. m. southwest of the temple of Apollo was cleared to an average depth of 3 m. The destruction of ancient remains was found to be greater than in any other part of the site of Corinth that the School has excavated. This is due to the relatively slight accumulation of soil here above the ancient level, which is determined by a bit of Greek pavement (PLATE XVII, A),¹ preserved farther north and cut into by piers of an early Roman building. Such foundations as are to be called ancient, by reason of their alignment and character, exist only in their lower courses and these have sometimes been tampered with in later ages. A series of six vaulted rooms on the west side of the excavations, presumably cellars of Turkish times, is particularly responsible for the thoroughness of the demolition of ancient remains there. The mediaeval walls, as usual, were found to extend very deep and contained some good architectural members.

¹ In the sketch-plan of the excavations (PLATE XVII), for the sake of clearness, Byzantine and later walls are purposely omitted.

The second field of excavation lay to the east of the first, on the other side of the road which leads from the west end of the temple of Apollo past the church of St. John the Theologian in the direction of the Akrokorinthos. From a point 18 m. south of the enclosure in front of the church a trench, averaging 9 m. wide at the top and 5 m. at the bottom, and 66 m. long, was run to the southernmost limit of the expropriated land (cf. PLATE XVII). This south end of the trench crossed the line of an ancient building which can be nothing else than a *stoa*. There is a rear wall with remains of late stucco painted red; there are piers for interior columns, their axis 5.70 m. from the inner face of the rear wall; and there is a broad foundation for the columns of the front, its inner edge 5.60 m. from the axis mentioned. All three are constructed of the local *poros*.

The piers for the interior columns measure *c.* 1.40 m. on a side. The better preserved of them consists of six courses, alternately header and stretcher, aggregating 2.73 m. below the missing top course, before it reaches the hard-pan, which is here cut in a peculiar line. The stones of the piers show notches at the angles to prevent a horizontal girt rope from slipping.

The foundations of the stylobate are full as massive as the piers, and in alternate header and stretcher courses extend to about the same depth. In front, its top flush with the upper surface of the second course preserved, is a gutter, 0.30 m. wide and 0.15 m. deep, cut in blocks of *poros* averaging 0.93 m. long. This was to receive the water from the roof, and it gives with certainty the ground level outside the *stoa*. From its position in relation to the gutter, the highest course preserved is either step or stylobate. Stylobate, however, it cannot be, for its width is greater than is permissible on the general scheme of proportions, and, moreover, the pry holes on its upper surface show that it was not the original top course. It is, then, a step. Its outer portion is formed by a narrow stone separate from the principal block, whose front face is cut

with less care than is the stone in general. On this front face there is, further, no *anathyrosis*, while the *anathyrosis* of the lateral joint is not three-sided, as one would expect, but only on top and back. There is only one explanation possible: the stone was originally of the full width of the course, but the part projecting as step beyond the stylobate was in some way damaged, so was cut away and a new stone inserted, the joint coming about at the line of the face of the stylobate. Whether



FIGURE 1.—STYLOBATE OF NEW STOA FROM REAR.

this was done for the whole length of the *stoa* or only in a certain part thereof can, naturally, not be stated: *a priori*, the latter is the more probable alternative. On the rear of some stones of this course appears a Δ as a mason's mark (Fig. 1).

The two piers for interior columns uncovered in the trench are c. 4.67 m., centre to centre. While this distance is possible for the wooden epistyle of this series of columns, it is too great to be spanned by the stone *epistylia* to be postulated for the columns of the front. If, as is usually the case, the axial

distances of the exterior and interior columns are in the ratio of 1:2, we should have for the former the figure 2.335 m.

That this figure is correct, may be further shown by the evidence contained in the stylobate of the exterior columns. Here the length of the stones in the step course and in the course below is from 1.165 to 1.17 m. The pry holes on the upper surface of the step course show that the blocks of the next course above were also of this length and broke joints exactly with those of the step course. Two of these stones taken together give a length 2.33 to 2.34 m., or exactly that obtained above for the axial distance of the outer columns. In view of this agreement, this figure may with complete certainty be regarded as correct, since it is the rule for regularity in size of the stones of a stylobate to depend on the axial distance.

Restoring this upper course according to the indications given, it is to be noted that the centre of a stone, and not a joint, comes opposite the axes of the interior columns. This fact, once it is assumed that the interior columns are opposite exterior columns, as is usual, shows that this course is the stylobate (as has thus far been taken for granted), and not a possible second step, in view of the well-known practice in buildings of moderate size of placing a column in the middle of one stone, and not on the joint between two stones. With columns thus spaced and resting each on a block of the stylobate, it follows that in each intercolumniation there is a similar block, with no column resting on it.

The original length of the *stoa* cannot be determined without further excavation ; and while this is feasible to the west, to the east it would soon become a costly undertaking, as there are dwelling-houses directly in its line beyond the tract at present expropriated. When the *stoa* is prolonged to the east on a plan of the neighborhood, it is seen to run north of trial Trenches XXIII (1898) and VIII (1896), if it extended so far. (Cf. *Am. J. Arch.* II, 1898, p. 501 ; *Records of the Past*, I, 1902, at p. 34.)

Since a foot of 0.328 m. may be inferred in the construction of the *stoa*, the axial distance here of 7 *podes*, 2 *daktyloi* (2.337 m.) seems so little a natural round number to be employed that it is more likely to be the natural subdivision of a total length fixed by the circumstances of the site.

For the date of the *stoa* the following considerations may be urged. The fill about the piers for the interior columns included among a larger number of fragments of simpler local ware, not readily datable with exactness, some specimens of Attic red-figured vases of the later "fine" style. The date of these, consequently, furnishes a *terminus post quem* for the *stoa*. On the other hand, the solidity of its construction and the care exercised in laying the stones so as to break joints exactly, their length depending directly on the axial distance, even where they were below ground, show that it belongs to an earlier, better period in the architectural history of Corinth, than does, for example, the South Stoa whose date is pretty certainly the third century B.C. The newly found *stoa* may, then, be assigned with some probability to the end of the fifth century, or to the fourth. This is as close a dating as seems possible, nor is it probable that the discovery of portions of its order would enable a more precise date to be given.

Not only is the *stoa* of interest from its great depth front to back, making it in this respect one of the very largest porticoes in Greece, but its topographical bearing is also of the utmost importance. It faces north. The principal buildings found in previous years either faced south or fronted the road to the east of the temple hill. The new *stoa*, therefore, is opposed to those buildings which lie directly below the south side of the temple of Apollo. The conclusion is inevitable: it forms part of the southern boundary of the Agora, — regarded as an open space, — as the *stoa*, and later the shops, under the temple hill bound it on the north. Thus is the surmise, made in 1898 in connection with Trench XXIII, confirmed, though based on insufficient evidence, and the final goal of the excavations brought appreciably nearer attainment.

The level of the new *stoa*—its stylobate (restored) 3.40 m. below the stylobate of the temple of Apollo—appears to have been maintained also in the area northwest of it, where one would expect to find the western limit of the Agora, but where, as has been already said, the destruction of ancient remains prevents any intelligible ground plans being made out. Here, a Greek pavement east of the wall B (a terrace wall?) is 3.45 m. lower than the temple stylobate. Farther west the Greek pavement (pebbles in cement) at A lies higher, with a reading 1.95 m. below 0.

It can hardly be a mere chance that the new *stoa* and the old temple of Apollo are exactly parallel; the line of the latter must have had more determining force than is usually thought to be the case in the layout of Greek temples and neighboring buildings.

Of the other remains in the trench less can be said, its narrow dimensions not admitting all their bearings to be appreciated. Within the limits of the *stoa* are traces of a characteristic Corinthian pavement of ground and rammed *poros*, antedating the *stoa*, as shown by its level, and here and there in the trench north of the *stoa* were found similar pavements, at various levels, sometimes superimposed, and hence of different dates. Portions of all of such have been left as found. In view of the difficulty of dating these pavements from internal evidence only, it is out of the question to discuss with any certainty the slope in front of the *stoa*. Apparently there was a gradual—not over 5 per cent—fall of the ground to the north, with steps where the drop was more rapid, some 30 m. away from the *stoa*. Starting close to the front of the *stoa* and extending north for 13 m., or more, is concrete, presumably of Roman date, perhaps the foundation of a pavement.

The partially excavated building D, is, to judge by its technique, either late Greek or early Roman. The floor of the interior seems to have been lower than the ground outside to the south. North of this, beyond, and 0.75 m. lower than, a bit of slab paving bearing unmistakable traces of fire, the hard-

pan was reached at a depth of only 0.17 m. above the level of the stylobate of the South Shops,¹ showing that there is no abrupt transition here such as appears at the west end of the South Stoa, where the difference in level between it and the pavement by B is some 3.70 m., so that in antiquity there was probably no direct communication from one to the other level there.

Of portable finds from the excavations there is this year the usual number, and more, if anything, than the usual variety, though there are no large single pieces to be compared with the best of some earlier years. In this preliminary account only those which, for one or another reason, are of special interest will be mentioned; no attempt will be made to catalogue them all.

Some 30 m. north of the *stoa*, in a late wall, occurred an old Doric capital for a column of about 0.90 m. upper diameter. Its profile resembles closely that of the capitals of the temple of Apollo, and its dimensions would permit it to have been from one of the lower tier of interior columns.

At the bottom of a mediaeval wall west of the church of St. John was found a perfect example of a type of capital of which two other fragmentary specimens exist. At the bottom is a row of eight round-lobed *akanthos* leaves. Above these rise four similar, but longer, leaves, which are prolonged to the angles of the *abacus* of Corinthian type. On each of the four sides, between the leaves of the second row, and immediately below the *abacus*, is a head, now of a bull, now of a horned lion, against a background of wings in flat relief. It is of white marble and has a bottom diameter of 0.58 m. The period to which it belongs would be early Byzantine.

In the field of sculpture the most interesting piece (PLATE XVIII) is the torso of a *kriophoros* (Inv. 686), a replica of the Hermes Kriophoros in Wilton House (Michaelis, *Ancient Marbles in Great Britain*, p. 702, no. 144). The differences are

¹ The west end wall of the South Shops was followed this season by means of a tunnel for some 10 m. from its start on the stylobate of the South Stoa.

in non-essentials, and the size appears the same, so far as can be computed from the inadequate representation in Clarac, pl. 658, 1545, B), often reproduced. Noteworthy is the same flat pillar behind the figure.

Among inscriptions may be mentioned one (Inv. 379) which gives the victors in the *Καισάρεια*, the first man named twice successful with a *λογικὸν ἐγκώμιον*, another once with a *ποίημα*.

In the trench dug in the dumping field, before filling it with earth, there was found, among Roman walls, a small fragment of Arretine ware bearing the inscription, C·TETI· PH·RO Cf. *C.I.L.* XI, 6700, 675 and references there given.

Above the ancient level in front of the *stoa*, and hence with no significance attaching to its place of finding, there was turned up part of a matrix of soft limestone for forming gold ornaments in relief. It may be assigned to the sixth century B.C.

In deep digging west of the church of St. John, in the general neighborhood marked by the letter C (PLATE XVII), directly above the *stereo*, there was found a stratum containing potsherds of unusual interest. The greater number are without any decoration whatever, but a fair proportion have simple linear ornaments either incised (on the fragments of dark clay), or painted in lustreless brown or black (on the lighter clays, green, red, brown), or rarely white (on a black surface). A spiral occurs but once, and then in an undeveloped form. The vases in the incised technique are frequently hand-burnished. The shapes of the vases are not numerous, and show them to have been intended for household purposes.

In with the sherds were found a number of broken flakes of obsidian¹ and some pieces of bone, several of them certainly shaped with reference to use as tools. No metal was observed.

There can be no doubt from what period these vase fragments come; their characteristics are unmistakable. They

¹ Obsidian was also discovered, in 1898, in digging on the southwest corner of the temple hill.

are "pre-Mycenaean,"—if a term may be used which connotes so much in time,—and must be put in that large class of pottery of which every year brings to light examples from new sites, from Thessaly to Crete. In this class they are rather early than late, if undeveloped forms and simplicity of decoration are fair criteria of date.

T. W. HEERMANCE.

ATHENS, GREECE,
August, 1904.

SOME PRESENT PROBLEMS IN THE HISTORY OF GREEK SCULPTURE

[AN ADDRESS PRESENTED AT THE INTERNATIONAL CONGRESS OF ARTS
AND SCIENCES IN ST. LOUIS, IN THE SECTION OF THE HISTORY OF
CLASSICAL ART]

BY the term "classical art," as used in the language of this Congress, I understand Greek art and what is commonly called Roman art, which is mainly late Greek art on Roman soil. The history of each great branch of this art—architecture, painting, and sculpture—presents problems which might profitably be here discussed. Thus in the field of architecture we might take up the origins of the Doric and Ionic orders, or the question as to how much of what we are accustomed to think of as characteristic of Roman architecture—its use of arches, vaults, and domes, its combination of the arch with the decorative column and entablature, its treatment of architectural details and ornaments—was borrowed from Greek architecture as it existed in Alexandria, in Antioch, and in other flourishing centres of late Greek civilization. In the field of painting an attempt might be made to explain on what evidence and by what methods some shadowy semblance may be conjured up of the works of the great painters of the fifth and fourth centuries B.C.; or, under the stimulus of a recent essay,¹ to consider the extent of the originality in design and in technique displayed by the extant frescoes of the Roman imperial period.

Clearly, however, it would be unwise to include matters so various within the limits of a single address, and I have there-

¹ Wickhoff, *Roman Art* (translated by Mrs. S. Arthur Strong).

fore chosen to confine myself to a single branch of Greek art, namely, sculpture.

What would an ideal history of Greek sculpture be? Suppose that a man equipped with the highest native capacity for the task and with the best training attainable at the present day had sources of knowledge as complete for the Greek period as for the nineteenth century of our era, what manner of history would he produce? Whatever else his work might contain—and that might be much—it would set clearly and unquestionably forth the general qualities characteristic of Greek sculpture in each successive phase of its development, the distinctive features of each great local school, and the individual styles of numerous artists great and small. The reader would learn to know Myron, Phidias and Polyclitus, Scopas, Praxiteles and Lysippus, more fully and certainly than we can know Donatello and Michelangelo. The influence of each of these great masters upon his fellow-sculptors, his pupils and successors would be disclosed, and scores of other sculptors of varying degrees of genius would receive adequate treatment. All this of course would be done with the help of illustrations, which would present to the eye a long gallery of statues and reliefs, each piece complete in form and color as when it left the master's hand.

How far we are from possessing any such history of Greek sculpture as this every beginner knows. Of the necessary materials for such a work only a small fraction exists. Instead of full and authoritative literary documents we have the brief and unintelligent summary compiled by the elder Pliny, the scattered notices in Pausanias and other writers, chiefly of Roman imperial date,—notices often vague and only in the rarest cases penetrating and precise,—and finally some hundreds of inscriptions giving names of sculptors, occasionally with one or two additional particulars, but mostly referring to works of which not a vestige remains. However, as literary documents are of only minor importance to the historian of art, our poverty in this matter could be made light of, were the works

themselves preserved to tell their story to one skilled to decipher it. But in truth the actual remains of the finest Greek sculpture are exceedingly scanty. Of grave-reliefs and votive reliefs and sculptures used as decorations for temples and mausoleums we have, to be sure, a great many, though in a mutilated condition. But of independent sculptures in the round, such as statues of divinities, of athletes, statesmen and men of letters, we have from the best period very few. The masterpieces on which the fame of the greatest sculptors rested are without exception lost, and we are fortunate when one of them can be identified in a copy or copies of Roman date. Copies, in fact, executed during the century preceding and the two centuries following the beginning of the Christian era, constitute a large part of our monumental testimony to the history of Greek sculpture. That we have them is the chief reason why we may know the art of Polyclitus or Praxiteles more fully than we may hope to know the art of Polygnotus or Apelles.

The historian of Greek sculpture, having these materials at his disposal, ought to base his views as to the artistic style or styles of a given time and place primarily upon extant original works of that time and place, including every class of artistic remains,—sculptures, paintings, coins, gems,—in short all surviving products of the graphic and plastic arts. Into the framework thus obtained he must fit those lost works which he recreates in imagination from copies. Where trustworthy evidence fails, as it often does, he must perforce make large use of hypothesis, and, however cautious his temperament, he can hardly fail at times to confound plausible hypothesis with well-established fact.

If this meant that we are doomed to endless, unprogressive guesswork, it would be discouraging indeed. Fortunately nothing of the sort is true. The advance which has been made during the last hundred years in the understanding of the history of Greek sculpture has been enormous and is going on at the present day with accelerated speed. This advance comes about in part through the constant accession of new

materials. Even literary documents come to light, like the fragment of a list of Olympian victors¹ found in Egypt and first published in 1899, which has supplied us with valuable dates in the careers of Pythagoras, Myron, and Polyclitus. New sculptors' inscriptions continue to be discovered. And above all, the stock of known sculptures is augmented each year by pieces which had been hidden under ground or sometimes even at the bottom of the sea. Herein is one of the great, exciting compensations to the student of Greek art. Every fresh discovery makes a problem. The new thing must be studied and assigned to its proper place. It may become the starting-point for a new set of hypotheses and so lead to an extensive readjustment of views previously entertained as to the history of Greek art.

To this accession of new material there must come an end, and that end cannot be very far off. But the study of old material is only less fruitful than the acquisition of new, and it is hard to foresee a time when discoveries can no longer be made with the materials in hand.

Something has already been said of the part which the study of copies plays in our reconstruction of the history of Greek sculpture. Your attention is now invited to some of the more general questions which that study involves. I realize as fully as any one that art-criticism, to be profitable, must be exercised on the actual object. Abstract discussions are likely not only to be dull, but also to miss the essential point. Yet I venture to hope that a few considerations may be worth putting forward, even without the help of visible illustrations.

To begin with, we need a working theory as to how these copies were made. We know that in the Roman imperial period, to which they chiefly belong, the practice of taking casts from statues, or at least from bronze statues, was in use. Casts are easily multiplied and easily transported, and from a cast or casts a workman or workmen, in the same or different parts of the empire, could make any number of copies in bronze

¹ Grenfell and Hunt, *Oxyrhynchus Papyri*, part II, no. ccxxii.

or marble, agreeing with the original in dimensions and in all principal features. But the opinion has recently been urged¹ with great force that the taking of casts from marble sculptures was impracticable, for the simple reason that Greek marble sculptures were always more or less painted and the process of making a mould would have injured the coloring. Hence it is inferred that we must draw a sharp line of distinction between two classes of reproductions. On the one hand, from originals of bronze we have copies, in which a high degree of fidelity may be presumed; on the other hand, from originals of marble, and, it may be added, of gold and ivory, we have imitations whose trustworthiness is much less. Thus,—so the inference runs,—while we may form a fair idea of the bronze Discus-thrower of Myron or the bronze Doryphorus of Polyclitus, we cannot know, except vaguely, the gold and ivory Hera of Polyclitus or the marble Cnidian Aphrodite of Praxiteles.

Here is a matter deserving serious consideration. Yet the distinction is perhaps not so important as it at first appears. We have no assurance that the copies of bronze statues were always or even usually made from casts, although that is possible. And even if they were, it must be remembered that the possession of a cast, while it made fidelity in the copy possible, did not by any means necessitate fidelity. On the other hand, Greek marble sculptures may in some instances by the Roman period have so far lost their coloring that no objection would be felt to taking casts from them. And when this was not the case, it must often have been possible to make an accurate model in clay of a marble work, and from this model to make casts, as has recently been done for one of the archaic female figures of the Athenian acropolis. It is conceivable also that a copy was sometimes based upon drawings made in the presence of the original and perhaps accompanied by measurements. However it was done, it is certain that copies much too faithful to have been executed from memory were often made from marble originals. Thus in a caryatid of the Braccio Nuovo of

¹ S. Reinach, *Revue archéologique*, 1900, 2, pp. 384 ff.

the Vatican we have a Roman copy of one of the caryatids of the south porch of the Erechtheum, — in fact, of the particular one which was removed by Lord Elgin and which now stands in the British Museum. Again, there are numerous cases where a work of relief sculpture in marble exists in two or more copies. Take, for example, the relief representing Orpheus, Eurydice, and Hermes. Whether the Naples example is the actual original or not, the original, as of all such works, was certainly of marble. And in spite of the great inferiority of the Villa Albani example and the still greater inferiority of the Louvre example to that in Naples, the differences are not greater than we often find between different copies of a bronze statue. Now, it is true that no amount of resemblance between copies affords absolute proof of their resemblance to a lost original. It may conceivably be that all derive from a single copy, and that an inexact one. Yet, on the whole, a high degree of resemblance, especially between copies in marble from marble, is reassuring. It shows that fairly faithful reproductions were possible and were worth while. And, to conclude this matter, it does not seem necessary to regard with much more distrust the copies made from marble than those made from bronze.

Another question may be introduced at this point, although logically it belongs rather at the end than at the beginning of the discussion. The practice of copying Greek sculptures of the fifth, fourth, and third centuries B.C. is abundantly attested for the Roman imperial period. May we then assume that *all* Roman copies go back to Greek originals of good period, or must we consider the possibility that some of them represent originals created at Rome in the first century B.C. or later? Certainly we must consider the possibility. In a copying age there is no reason why the new should not be copied as well as the old, provided the new is in demand. Such demand did exist for portraits of the Roman emperors, and we accordingly find actual duplicates, though hardly so often as one would expect, in our stock of imperial portraits. Thus the famous head of the young Augustus in the Vatican

agrees in all essentials with one less well known in the British Museum, and a repulsive but powerful portrait of Caracalla is preserved in several substantially identical copies. But there is no clear case of an ideal creation of Roman date attaining to the honors of reproduction. To be sure, this statement may not pass unchallenged. A few years ago numbers of statues existing in two or more repetitions, such as the marble Artemis from Pompeii, the bronze Apollo with the plectrum from the same place, the "Venus Genetrix," so called, and the nude youth made by Stephanus, were commonly regarded as works of an archaistic school, whose founder was supposed to be Pasiteles, a Greek sculptor working in Rome in the earlier half of the first century B.C. This hypothesis of a Pasitelean school, which has been compared to the group of the "Nazarenes" in Germany and to that of the pre-Raphaelites in England, and whose productions have been supposed to be works of considerable originality and popularity, has now been generally abandoned. Yet it still has adherents in England. Thus, our best English handbook of Greek sculpture¹ defends the name of Venus Genetrix, regarding the statue so called in the Louvre and its replicas as copied from the cult-image made by Arcesilaus for the temple of Venus erected by Julius Caesar. But as the same authority holds that "the type, in its general character, dates from an earlier age," the difference between this view and that which regards the statues in question as copied from a fifth-century original is not, after all, very great. Similarly with regard to the athlete of Stephanus. According to one view, this is simply one of several copies of an early fifth-century bronze statue. It is not the best copy, and its singular proportions may be due to arbitrary modification of the original. According to the other view, this work, while greatly influenced by the style of the fifth century, is essentially a new creation, not necessarily of Stephanus himself, but perhaps of Pasiteles, or at any rate of about his time. Under all the circumstances of the case the former hypothesis appears

¹ E. A. Gardner, *Handbook of Greek Sculpture*, § 78.

to me far more probable. But the side which we choose to take in the controversy does not greatly affect our conception of fifth-century art, though it does make considerable difference in our estimate of the artistic conditions in Rome in the first century B.C. And even if we allow an exception or two, it will still remain true that in dealing with copies, excepting portraits of Roman emperors and one or two other Roman personages, we are dealing in the vast majority of cases with reproductions of much earlier originals.

Let us now suppose we are studying a piece of sculpture which we suspect of being a copy, and which we wish to assign to its proper historical place. If we are equipped for the task, — that is to say, if we are endowed with good powers of observation and are extensively acquainted with the monuments of Greek art, — we shall of course inevitably form a theory on the subject at the outset. But realizing the fallibility of any copy, we shall search through the existing stock of antiques for duplicates of the work under consideration. If there are any, they must all be taken into account, just as all the manuscripts of an ancient author must be taken into account in the attempt to reconstitute his original text. Let us suppose, to begin with, that we find one or more such duplicates, agreeing with the first piece in all principal features. Obviously either one of the number is the original and the others are copies from it, or all are alike copies of a lost original. The former alternative is possible enough in the abstract, and there are some cases where it is actually held, more or less confidently, by one or more archaeologists. The cases, however, where it may be considered practically certain are extremely few. In general, no one of the duplicates has any claim to being regarded as the original. All are alike copies. But copies are given to varying among themselves according to the varying skill and conscientiousness of the copyists. No one of them, even though artistically it outrank the others, can be safely trusted to reproduce more faithfully than they every detail of the original. Hence they must all be diligently compared, in the hope of

divining from their collective testimony the prototype. In this undertaking a merely mechanical procedure, such as deciding by a majority vote of the witnesses, will not do. There must be a divinatory instinct. But alas! the faculty of divination, however sure it may be of itself, cannot always impose its results upon others. Its operation often seems arbitrary, and carries no conviction save to docile disciples. And if this is the case when we are comparing two or more slightly varying copies, how much greater is the danger when our search for duplicates proves unsuccessful and we are left with but the single representative! Yet in spite of all difficulties and perils the serious student cannot shirk the problem. He must form his mental picture of the lost original as best he may, and reveal it to others as clearly as possible. If he succeeds in winning the approval of expert opinion, his view has attained to as much certainty as the nature of the subject admits.

Thus far we have been supposed to be dealing either with a single copy or with two or more substantially identical copies. But the case is by no means always so simple. Often we find, besides a number of copies essentially similar to one another, one or more variants, or, in other words, pieces so far like the agreeing copies that they cannot be wholly independent, yet so far unlike that they cannot in any strict sense be identified with them. The most obvious explanation of such a variant is that the sculptor who executed it was simply modifying the same Greek original which is represented also by more exact reproductions. In one case he may have worked from memory, and his divergences from the original may not have been intentional. In another case he may have had an exact copy before him and may have deliberately adapted it to some purpose of his own. No one doubts that this explanation, in one or other of its forms, is often applicable. Every one makes free use of it. Yet a different explanation is sometimes possible and is sometimes preferred. What I have called a variant may itself be a faithful copy of a lost Greek original, so that we are led back to two closely related Greek originals,

produced by the same sculptor or by two different sculptors, one of whom in some way influenced the other. For example, there is at Mantua a coarsely executed marble figure of a Muse, holding in her right hand a tragic mask. This statue, while it has no known duplicates, is closely similar in pose and drapery to the caryatids of the Erechtheum. In view of this similarity it was seriously proposed¹ a few years ago to treat the Mantuan figure as a copy of a Greek work of about 400 B.C. But really it seems most improbable that a Greek sculptor in the flourishing period of artistic activity, in seeking to create a Muse, should have imitated so closely figures used as architectural supports, however admirable, or *vice versa*. And I am glad to say that the author of the suggestion retracted it² not long after in favor of the common-sense view that the Mantuan Muse is nothing but an adaptation of one of the caryatid figures by a late and clumsy sculptor.

A better example is afforded by the Farnese Diadumenus in the British Museum. Of this statue, again, there are no duplicates; in a sense it stands alone. Yet it can hardly be dissociated altogether from those other Diadumenus figures which are believed on good grounds to be copied from a work of Polyclitus. The similarity in motive goes so far as to make probable some close interdependence. How, then, are the facts to be interpreted? Two theories are possible, as in the previous case: either the Farnese Diadumenus is the work of a sculptor of Roman date, a work based upon the famous statue of Polyclitus, but so far modified as to attest considerable originality on the sculptor's part, or it is a copy of a Greek work of about Polyclitus's time, perhaps an Attic work which Polyclitus saw and whose motive he borrowed and adapted. The question, it will be seen, like that of a Pasitelean archaizing school, is chiefly a question of the amount and kind of originality which may be assumed for the sculptors of the Roman imperial period. Certainly an age which produced

¹ Arndt, *Photographische Einzelaufnahmen antiker Sculpturen*, Text, no. 9.

² Arndt, *op. cit.* no. 257.

works of such merit as the reliefs of the Ara Pacis, of the Arch of Titus, and of the Beneventine Arch of Trajan was not wholly deficient in artistic originality. But it must be admitted that for the precise kind of originality which would be implied by the creation of the Farnese Diadumenus out of Polyclitean and other fifth-century suggestions, our knowledge of the Roman period does not afford irrefutable evidence. The question is one on which serious students must for the present agree to differ.

The most ambitious historians of Greek sculpture are not content with placing a lost original, divined from a copy or copies, in its proper place and period. They would fain go farther and assign each work, or at least each important work, to the individual master who produced it, whether known to us by name or not. As slight external helps in this task they have the scanty literary notices referred to at the outset of this address, but in the main they are obliged to rely upon the qualities of the works themselves. Here there is a temptation to apply the method pursued with so much zeal and confidence by Morelli and his followers in the field of Italian painting, the method which in discriminating artist from artist makes large use of little noticed details, such as conformation of eye or ear. But the data presented to the student of Greek art are hardly comparable to those presented to the student of the Italian art of the Renaissance. In the latter field we have sufficiently well authenticated original works upon which to base our knowledge of the personal styles of the different masters, and from this sure foundation we may proceed to recognize other creations of theirs. But in the former field this sure foundation is almost everywhere lacking. With the fewest exceptions we are limited to mere copies. Now the broad features of a work of art, such as pose, proportions, disposition of drapery, survive in the better sort of copies, but the minutiae upon which we are tempted to rely in the effort to distinguish master from master—form of tear-duct, of ear-lobule, or whatever it be—may be due to the copyists and therefore valueless for the pur-

pose desired. Indeed, the subjection of these inconspicuous details to the law of habit, which makes them useful as identifying marks, renders it unlikely that they would be reproduced save in copies of superlative accuracy; and copies of superlative accuracy are unfortunately very rare. Hence that method of connoisseurship which examines, as one help toward recognizing the individual master, the treatment of inconspicuous details must be regarded as largely inapplicable in dealing with Roman copies, or at least as of dubious probative force.

Again, the problem of recognizing, whether in originals or copies, the works of a single master is not merely the problem of recognizing decisive similarities. An artist's productions may vary greatly in different periods of his career, or even in one and the same period. If we are trying with our bits of evidence to make out the achievements and so the personal style of a great Greek sculptor, we need a theory as to the limits of the variation which we may in reason attribute to him. How are we to form such a theory? Judgments on this point commonly have an air of *a priori* dogmatism. Some one proposes to attribute two works to the same artist. The objector says: "No. The differences between the two are too great." No proof is offered, but such a verdict, in spite of its air of intuitive certainty, is doubtless derived more or less consciously from one's knowledge of art and artists generally in the past and in the present. Now I think that what is needed is a more thorough-going study directed to this very point. The work of artists of modern times lends itself to the purpose. Only when we have satisfied ourselves as to the widest limits of variation shown by any one of them are we in a position to form so much as a legitimate guess as to whether two Greek works are too unlike to have been conceived by a single brain and executed by a single hand.

Let me illustrate. There exist in Dresden two closely similar Athena figures, one headless, the other with head partially preserved. By combining, on the strength of convincing proof, a head in Bologna with the headless Dresden figure, and by

supplying what else is missing in one from the other, two complete and substantially identical statues have been won.¹ It is argued that in these we possess copies of the Athena Lemnia of Phidias. Certainly the original must have been a work of extraordinary merit and one of the Phidias age and school. There is some literary evidence, based chiefly upon the absence of a helmet from the head, for believing it to be by Phidias himself. While this external evidence is far from satisfactory, it appears to me to establish a considerable probability that the work, whether it be the Lemnia or not, — a point I would waive as of little consequence, — is at any rate by Phidias. But the objection is raised² that the type of face is so different from the type of face of the Athena Parthenos of Phidias, known to us from unquestionable, though poor, copies, as to throw the gravest doubt on the proposed attribution. The difference does seem great: in the Parthenos a broad face, with full cheeks and cheerful look; in the other, a narrow oval face, with sober, even severe, expression. Can we suppose that one artist conceived and presented to his countrymen the same goddess in two aspects so unlike? Casting about for guidance here, I can think of nothing better than to examine the sculptured Madonnas of Michelangelo to see how far they agree among themselves in type of face. As a result I find between the circular relief in the Bargello, with its comparatively broad face and untroubled look, and the Bruges Madonna, with its narrow face and solemn expression, both of them productions of Michelangelo's early period, a difference which to me seems as great as we are obliged to suppose between the original Athena Parthenos and the original of the Bologna head under discussion. If my estimate be just, then there is surely no insuperable difficulty on this score in accepting the original of the Dresden statues as the work of Phidias.

¹ Furtwängler, *Masterpieces of Greek Sculpture*, pp. 4 ff.

² Robinson, *Catalogue of Casts of Greek and Roman Sculpture in the Museum of Fine Arts*, Boston, p. 89.

Take another specific problem of a similar nature to the last, — a problem which has only recently come into the forefront of interest and which for this reason deserves to be treated somewhat more fully. For fifty years and more until the other day a marble statue in the Vatican representing an *apoxyomenus*, i.e. an athlete scraping himself with a strigil, has been universally regarded as an excellent copy of a bronze statue by Lysippus and as giving us our most trustworthy knowledge of that sculptor's style. This supposed knowledge has come to be a corner-stone in the history of Greek art. With our proneness to accept "what is believed always, everywhere, and by all," many of us had probably until lately not taken the trouble to scrutinize critically the evidence on which the identification depends. Let us look at it. Lysippus made an *apoxyomenus*, which was carried to Rome, was set up by Marcus Agrippa in front of his *Thermae* and was there much admired. These facts do not carry us far, for the subject was no uncommon one and we possess no detailed description of the treatment of it by Lysippus. But the marble statue in question exhibits a system of bodily proportions radically different from that of Polyclitus and agreeing with the valuable, though inadequate, indications afforded by Pliny regarding the innovations introduced by Lysippus. On reflexion, however, we see that the agreement does not really clinch the matter. At most it only proves that the original of the *Apoxyomenus* of the Vatican is not earlier than Lysippus; it does not prove that it is not later. But here other considerations come in, more difficult to weigh in the balances, but perhaps more influential in determining our opinion. We have copies, one of them certified by an inscription, of another work of Lysippus, a *Heracles* leaning upon his club, and it seems as if the *Apoxyomenus* fitted in very well with that. Moreover, it has been thought that in pose and in details of modelling this statue is such as might be expected from the greatest sculptor of the age of Alexander, a sculptor whom it is permissible, if not obligatory, to regard as at least twenty years younger than

Praxiteles. It has been thought that what we know or guess of other sculpture of the age of Alexander and later can be brought into intelligible relation to the Apoxyomenus, considered as Lysippean. And as not the least potent argument there has been the feeling that this statue is too fine to be the work of some nameless or obscure sculptor of post-Lysippean date.

These considerations would probably still continue to seem sufficient to every one, had not a new claimant for Lysippean authorship made its appearance, with credentials which have carried conviction far and wide. I refer to the marble statue of Agias¹ found some ten years ago at Delphi. This is one of a group or rather a row of eight statues, representing eight members of a Pharsalian family, the family of one Daochus, tetrarch of Thessaly, who set them up soon after the battle of Chaeroneia (338 B.C.). The pedestal bore inscriptions, mostly metrical, giving the names of the persons represented, but no sculptors' signatures. Some of the statues, and above all the Agias, appeared from the first to the fortunate discoverer to exhibit the style of Lysippus. The matter entered a new stage in 1900, with the publication,² accompanied by an acute commentary, of a fragmentary inscription from Pharsalus, all but identical with the one engraved at Delphi below the statue of Agias, but with the important addition of the name of Lysippus as sculptor. There was then a statue of Agias by Lysippus at Pharsalus. Of this statue, presumably of bronze, nothing further is directly known, but it is inferred on reasonable grounds that it was one of a series identical in subjects with the series at Delphi and probably set up a little earlier. So far, so good. The next step is to infer that the unsigned marble Agias at Delphi is a contemporary and trustworthy copy of the bronze Agias by Lysippus at Pharsalus, and this inference has been promptly accepted by leading archaeologists, German, French, and English, without a murmur of doubt or protest, so far as I know, from any

¹ *Bulletin de correspondance hellénique*, 1899, pls. x, xi.

² Preuner, *Ein delphisches Weihgeschenk*.

quarter. But whereas some who speak with authority have regarded the Agias and the Apoxyomenus as harmonious productions of a single artist, and as in fact confirming each other's claims to Lysippean authorship, another view is that the Apoxyomenus shows such fundamental differences from the Agias and from other undisputedly fourth-century works that it must not only be denied to Lysippus, but be assigned to a post-Lysippean date. The argument is summed up in these sentences: "The feet are in the case of the Apoxyomenus a feature which can scarcely be reconciled with a fourth-century origin. If we compare them with the foot of the Hermes of Praxiteles, we shall find not merely a difference of school, but a difference so deep that it must show a different date. And can another work of the fourth century be found which shows the mastery of anatomy, and the precision in the rendering of detail, which we find in the Apoxyomenus?"¹

But, after all, why should we regard the Agias of Delphi as Lysippean? The Thessalian tetrarch resident in Pharsalus decides to set up in his own city bronze statues representing earlier members of his family and himself, and for this series he engages the talent of the foremost sculptor in bronze of the day and perhaps that of others. At the same time or later he decides to set up at Delphi marble statues representing the same persons. That he should use the same metrical epigrams for the two series is natural and appropriate. But is there any reason why the two sets of figures should look exactly alike? None, that I can see. The earlier members of the series, including the Agias, must probably be imaginary portraits, and I cannot suppose that any Greek would compare two sets of imaginary portraits in places separated by a journey of several days to see whether they agreed, or that he would be in the least surprised or disconcerted if he should happen to notice discrepancies. If it were a common practice of the time to make exact copies of statues, then indeed it would be the most economical and might be the most natural thing to have

¹ P. Gardner, *Journal of Hellenic Studies*, 1903, p. 130.

the bronze statues copied in marble. But in spite of what Pliny says about the invention by Lysistratus, brother of Lysippus, of the art of making casts from statues, there is no good reason to think that exact copying was common in Lysippus's day; indeed some would go so far as to say that it was not practised at all. Therefore I think that Daochus would give the commission for the Delphian series, not to Lysippus and his associates, but to a sculptor or sculptors who habitually worked in marble, not hampering them with restrictions as to the relationship of their work to the other series. Whether they would be likely or not to be dominated by the influence of Lysippus it is impossible to say *a priori*; perhaps not, as his work seems to have been exclusively in bronze. At all events, it is clearly unsafe to make the Agias our basis for determining the personal style of Lysippus.

What is certain, then, is that in the Agias of Delphi we have a marble statue contemporary with Lysippus, and the question recurs whether, in view of its qualities and those of other works of the time known to us in originals or in copies, we are forced to assign the Apoxyomenus to a post-Lysippean date. As in the case of Phidias we faced the question, how wide a range of variation is possible to a single artist, so here we face the question, how wide a range of variation is possible to different artists living at the same time and under the same general conditions. For my own part, I am disposed to think that there is no fatal objection to believing that Lysippus, whom I regard as belonging to a younger generation than Praxiteles, was himself the creator of those innovations which mark the Apoxyomenus off from the Agias. And I am confirmed in this opinion when it is pointed out to me how far Lionardo da Vinci was in advance of Lorenzo di Credi, who was actually by seven years Lionardo's junior.

Finally some one may ask, "Is all this painful balancing of probabilities worth while? Why pursue this difficult path toward a dubious end? Why not take each remnant of classic art for just what it is in itself, enjoying it according to its

merits, and not tormenting ourselves with trying to establish its relations to other existent or non-existent things?" Perhaps these questions take us beyond the proper bounds of the subject prescribed for this address. Nevertheless I beg leave to say in answer that I have a good deal of sympathy with the point of view which prompts such questions. For the great multitude of cultivated people the important thing is to know and appreciate works of art, rather than to understand their history. A knowledge of the history of Greek sculpture is no more necessary to an enjoyment of the Elgin marbles than a knowledge of the history of music is necessary to an enjoyment of a symphony by Beethoven. There is reason to fear that in academic teaching the historical side of the study of art is disproportionately emphasized. But the detailed and comparative scrutiny upon which a knowledge of the history of art rests ought not to stifle the power of enjoyment. Rather it ought to make enjoyment richer and deeper. Moreover, the intellect has its rights, as well as the aesthetic faculty. It is a legitimate, yes, with some an imperative desire to know what can be known of the conditions, material and spiritual, that gave birth to immortal works of art. But let us not forget that what gives dignity to this study is the power of the work of art to stir the emotions, to divert, console, inspire. If we forget that, our study is barren of its chief reward.

F. B. TARBELL.

“CALYNTHUS” OR CALAMIS

WHETHER we adopt, in Paus. X, 13, 10, τέχνη μὲν . . . ἱππέων, the smooth reading ἐστήκασιν ἔργα, or believe that some form of *συνεργός* is contained in this vexed passage,¹ an unusual distinction is made between the two artists who made the second offering of the Tarentines at Delphi: the ἀναθήματα are the work (τέχνη) of Onatas, while “Calynthus,” too (τε), has done part of the work. The difference is further emphasized by εἰκόνες δὲ καὶ πεζῶν καὶ ἱππέων, a phrase which refers not so much to the central group as to those representatives of horse and foot — perhaps here two of each from the Tarentines and Peucetians — which are often found in warrior groups on each side of the combatants. These accessory figures were in whole or in part the work of the second artist, while the dedication as a whole — that is, its composition and central group — was the work of the Aeginetan (Onatas).

Among the “vocabulorum fragmenta” there is no trace of a gentile name, without which Pausanias rarely introduces an artist for the first time, except in the case of men so well known as Pheidias, Calamis, or Praxiteles;² while the name of Pha-

¹ No less than nine combinations of letters have been proposed after Καλύνθου. These may be divided into two classes, those adopting τε ἐστήκασιν ἔργα, and those which end in ἔργον. The former reading is contrary to the usage of Pausanias, who nowhere uses the tense system ἐστηκ- without defining the location by some adverbial expression, as ὑπὸ τούτῳ δὲ ἄγαλμα . . . ἐστηκεν. The only apparent exception I have found is in V, 23, 1, παρεξίοντι δὲ παρὰ τὴν ἔσοδον Ζεὺς τε ἐστηκεν, which is no exception at all. To make σι ἐργον into συνεργοῦ, reading τέ ἐστι τοῦ συνεργοῦ, or Καλλιτέλους ἐστὶν οἱ συνεργοῦ, or δς ἦν οἱ συνεργός, gives combinations equally unprecedented among the forms used by Pausanias to denote collaborators.

² Of thirty-one artists mentioned in Bk. X, nine have no gentile name. Seven of these are either well known or have been previously identified; and

lanthus, which occurs three times within a few sentences, suggests a reason for a confusion of letters by which some scribe turned a well-known artist's name into an unknown one. Or perhaps Pausanias was led into the same blunder by carelessness in jotting down his notes. The suggestion of Brunn¹ that the real artist was Calamis appears to be the correct one; for of the three most likely to be associated with Onatas, Callon is always called the Aeginetan, Calliteles² was scarcely famous enough to be employed on so important a work, whereas Calamis—to whom Pausanias nowhere gives a gentile name—once before divided work with Onatas in the same way, doing horses and riders while Onatas did the rest of the group.³ Such division of labor would accord with what is known of the respective specialties of the two sculptors.

It is quite possible to reconstruct the group from the account of Pausanias. The subject is the familiar one of a combat in which Tarentines correspond to Greeks, and Peucetians to barbarians. The differences between the two were expressed by different accoutrements. Pausanias does not mention the king of the Peucetians, who formed one of the group, as it is not likely that of the barbarians only an ally would be represented. Assuming this king, we have all the requisites for the conventional combat group of the time. Opis, the dead warrior, is in the centre, for Pausanias usually begins a description at this point, and a fallen enemy would become an accessory figure if placed at the side. Over him on one side stood the king of the Peucetians, on the other Taras, eponymous hero of Tarentum, while the figure of Phalanthus-Poseidon, characterized by

Pausanias confesses ignorance of Tisagoras, leaving only Tisander unexplained. The statements are less accurate in other books, notably in the first and sixth. Of one hundred and seventy-two artists mentioned throughout, thirty-seven nowhere have gentile names, of whom twenty are mentioned once only, about one in eight, against one in thirty in the tenth book.

¹ H. Brunn, *Künstlergesch.* p. 93.

² Paus. V, 27, 8.

³ Paus. VI, 12, 1. In ordering the group from Onatas and Calamis for Olympia, the Tarentines may have been influenced by the fact that these two artists had just been employed by their neighbors of Syracuse.

the dolphin, plays the part of protecting deity in the centre behind Opis, turned toward Taras. Behind Taras and the opposing king were standing warriors and horsemen, possibly a chariot on each side. The group was without movement, if it represented the moment of victory, and the figures were turned obliquely toward the centre, unless a semicircular basis was employed to give greater freedom in the opposition of the two sides, a suggestion which is somewhat impracticable for horsemen.

ALICE WALTON.

Sarah Wyman Whitman

1842-1904

[A MINUTE ADOPTED BY THE BOSTON SOCIETY OF THE ARCHAEOLOGICAL
INSTITUTE, NOVEMBER, 1904]

The loss to the Boston Society of the Archaeological Institute of America by the death of its President, Mrs. Henry Whitman, is not to be measured by any common standard. It is much more than the mere loss of the presiding officer—it is the loss of one whose character, genius, and social position gave to her office a peculiar distinction, whose clear, intelligent, and excellent judgment guided the councils of the Society with wisdom, and whose example was a constant inspiration to its individual members.

Mrs. Whitman had been a member of the Institute from its foundation in 1879, a member of its Council since 1894, and President of the Boston Society since 1897. During the years of her presidency, the Society increased alike in strength and in activity.

Her interest in the work of the Institute was not that of a professed student of archaeology, but sprang from her sense of its value as an element in the higher intellectual pursuits in the community, and of its close relation to the art of the ancient world. Her life was largely devoted to the study and practice of the fine arts, and there was no undertaking by which their beneficent influence could be promoted and in which she could be of service that did not receive from her the most efficient and intelligent aid. In every undertaking in which she took part, her part was of first importance.

The Society feels that in its own loss it is but a sharer in the great general loss to the community by the death of one who so used rare powers of mind and heart that her memory will be long cherished with admiration and affection by a wide circle of friends, and held in honor by the public at large.

ARCHAEOLOGICAL DISCUSSIONS¹

SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PERIODICALS

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GENERAL AND MISCELLANEOUS

Archaeological Methods.—A note of warning against the loose way of making identifications on insufficient bases and then assuming them to be proven facts is uttered by C. WALDSTEIN, in *J.H.S.* XXIV, 1904, pp. 129-134 (4 cuts).

The Primitive Aryan Hut.—In the *R. Stor. Ant.* VIII, 1904, pp. 426-454 (16 figs.) F. CORDENONS traces the development of the dwelling-house of the Indo-European race from its earliest form down to the historical era by means of the study of the hut-urns discovered in various places from Schleswig to Italy. He also describes, with illustrations, how the framework of these successive types must have been constructed, covered, and decorated. The earliest traceable dwelling-place of the stock was in northern Germany; and from the island of Bornholm, in the Baltic, comes the most primitive form of the hut-urn (that of Rönne). It represents a sunken pit, with a depressed fireplace in the centre, covered with a substantially hemispherical roof, through one side of which a doorway is cut, allowing access to the floor by means of a ladder. There is no window or smoke-hole. The next type in line of development is shown by the urn of Polleben (Schleswig-Holstein), where the hemispherical curve of the roof passes upward by a reversed curve to a truncated cylinder in the centre, the opening of which (for the passage of smoke) is protected by a small roof. The similarly shaped urn of Tochheim, and others, even

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor FOWLER, Editor-in-charge, assisted by Miss MARY H. BUCKINGHAM, Professor HARRY E. BURTON, Professor JAMES C. EGBERT, JR., Professor ELMER T. MERRILL, Dr. GEORGE N. OLCOTT, Professor JAMES M. PATON, and the Editors, especially Professor MARQUAND. In Professor FOWLER's absence, these departments are conducted by Professor PATON.

No attempt is made to include in the present number of the *JOURNAL* material published after July 1, 1904.

For an explanation of the abbreviations, see pp. 135, 136.

from Italy, show traces of external decoration in line and color, indicating that the earlier wattled walls must now have been smeared with clay. Square or oblong shapes are found as well as round, but the hut entirely above ground was still confined to the terramara and lake-dwellings. Even one of the Alban hut-urns of the Vatican, which shows an approach to the gable-roof type, with a smoke-hole above the door (and may be paralleled from Germany), has (though not usually so pictured) a lower part that represents the excavated underground body of the primitive Aryan dwelling. Later hut-urns show progress by the development of an entirely above-ground dwelling, with true walls and roof, a window as well as a smoke-hole, and even decoration with columns. Structural questions are discussed in detail.

Ancient Mosaics.—The article 'Musivum Opus' by P. GAUCKLER in *D. & S. Dict. Ant.* has been reprinted as a pamphlet. It contains a full account of this branch of ancient art. After discussing in an introduction the number, date, and origin, in Mesopotamia and Egypt, of the ancient mosaics, the author turns to a consideration of the Greek and Roman schools, and definitions of *opus musivum*, used only for walls, and *opus tessalatum* and *opus vermiculatum*, including *opus signinum* and *opus sectile*. The history of mosaic is divided into three periods: Alexandrian or Augustan, ending with the first century of our era; Roman or Antoninian, covering the second and third centuries; and Christian or Constantinian, extending to the Middle Ages. Each period is treated in detail with numerous illustrations, often drawn from the little known works in African museums. The art of the periods is briefly characterized, as in the first, Alexandrian, idealistic, aristocratic; in the second, Roman, naturalistic, democratic; while in the third, with the triumph of Christianity and the absolute monarchy, it becomes Byzantine, official, mystic, and theocratic. (PAUL GAUCKLER, *La Mosaïque Antique*, Paris, 1904, Hachette & Co.; pp. 46; 28 figs.; 4to.)

The Penannular Brooch.—The origin of the brooch formed by a ring and pin is discussed by E. LOVETT in *Reliq.* X, 1904, pp. 15-23 (10 figs.). He suggests that in the Stone Age the *os innominatum* of a deer or sheep may have served as a ring, and the *os calcis* as a pin for fastening skin garments. The rings and pins, commonly called armlets and hairpins, are probably such primitive fastenings. Similar rings and pins are even now in use in some districts of Scotland. The next step would be to attach the pin to the ring by a chain or cord, then by a hinge. As this form was inconvenient, the ring was split, so that the pin might pass through, and thus arose the penannular type.

Aksum.—Mrs. M. V. A. BENT contributes to *Rec. Past* III, 1904, pp. 35-42 (11 figs.), a brief account of the monoliths of Aksum, visited by her with her husband in 1892-93.

Arabic Inscriptions.—In *J. Asiat.* III, 1904, pp. 5-96 (13 figs.), MAX VAN BERCHEM discusses a group of mediaeval Arabic inscriptions, marks, and arms on objects of damascened copper or enamelled glass. Thirteen inscriptions refer to the Rassoulid sultans, who ruled in Yemen from 1229-1446. These are discussed at length. More briefly treated are two bronze keys, found in Egypt, but from their inscriptions apparently belonging to the great mosque of Mecca. One is of about 1364, the other of 1405. These inscriptions are published to show the value of a comparative study

of this class of inscribed objects, which was rendered possible in this case by the exhibition of Mussulman art held in Paris in 1903.

Ancient Bronze Drums from Asia. — A series of ancient bronze drums found in southeast Asia and the Indian Archipelago is discussed by W. FAY in *Mith. Anth. Ges.* XXXIII, 1903, pp. 390-409, with special reference to the work of Heger (*Alte Metalltrommeln aus Südostasien*), from whose conclusions he frequently differs. He criticises sharply Heger's classification, insists that the origin of the instruments is to be found in lower Siam and the surrounding region rather than at Tonkin, and dissents decidedly from the interpretation of the ornament. These drums seem to have been made in southern China as early as 41 A.D., to have been largely manufactured in the fourth century, but by the ninth to have been no longer cast.

Representations of Disease on Peruvian Pottery. — In *Proceedings of the American Philosophical Society*, XLII, 1903, pp. 378-396 (8 figs.), Dr. A. S. ASHMEAD discusses the vases in human form common in Peruvian graves, which show mutilation or destruction of parts of the face or of the feet. He argues that the loss of portions of the lips and nose is due to disease or surgical treatment, faithfully represented by the artist. The diseases indicated are syphilis and lupus (wolf-cancer). There is no indication that leprosy existed in the pre-Spanish period. The loss of the feet indicates amputation, but the causes for the operation are unknowable.

Pottery of the Eastern United States. — *The Twentieth Annual Report of the Bureau of American Ethnology* (Washington, 1903), pp. 1-201 (177 pls.; 79 figs.), contains a study of the aboriginal pottery of the Eastern United States by W. H. HOLMES. The introduction discusses the general questions of distribution, materials, and methods of manufacture and decoration, and various kinds of vessels. The rest of the article treats the extant remains according to a geographical classification. The abundance of illustrations has enabled the author to avoid detailed descriptions of individual pieces.

Mohawk Pottery. — In *Rec. Past* III, 1904, pp. 184-188 (4 pls.), W. MAX REID discusses briefly some of the characteristics of the early Mohawk pottery. The ware is hand-made, and frequently decorated with conventional arrangements of straight and diagonal lines. He also describes three large pots found in the Adirondack region.

EGYPT

Gold Enamels. — That the ancient Egyptians possessed the art of enamelling on metal has been generally doubted in the absence of any certain examples of this work. F. G. HILTON PRICE has shown the Society of Antiquaries two gold scarabs in which the elytrae are formed of cloisonné work filled in with a cobalt blue enamel. They are said to have been found near Karnak, and belong to the Ptolemaic period. (*Proc. Soc. Ant.* XIX, 1903, pp. 290-292; pl.)

Ivory Figurines. — In *R. Arch.* III, 1904, pp. 97-110 (10 figs.), Dom E. ROULIN (O. S. B.) discusses a number of ivory figurines recently found at Hieraconpolis and Abydos. Among them are two very primitive statuettes from Hieraconpolis, and from Abydos a spoon handle of the eighteenth dynasty, a statuette of an early king wearing the crown of Upper Egypt, much resembling the papal tiara, and the bust of King Cheops, found in 1903 by Petrie.

Models of Egyptian Capitals.—In *Proc. Soc. Ant.* XIX, 1903, pp. 292–297 (4 figs.), F. G. HILTON PRICE describes four small models of Egyptian capitals, two of the palm leaf, and two of the lotus and papyrus order. They were bought in Cairo, but their provenience is unknown.

Horus as Legionary.—G. BÉNÉDITE publishes in *R. Arch.* III, 1904, pp. 111–118 (fig.) a fragmentary statuette of black basalt from Egypt, in the Louvre. It represents a personage in the costume of an officer of a Roman legion, but holding in the left hand a small Egyptian bow. A discussion of this symbol as an attribute leads to the conclusion that it belongs to warrior-gods in general, and that this statuette represents Horus. It forms one of a series in which the hawk-headed god is represented in armor. The statue is a fusion of Egyptian and Graeco-Roman elements.

Ancient Tombs near Alexandria.—Two important tombs have recently been published. The first, at Sidi-Gaber, 4 or 5 miles east of Alexandria, has been partly destroyed by the sea. Originally it consisted of three rooms cut in the rock. A fourth and fifth room were added later. The technical execution was fine. The decoration of the walls, divided into three horizontal fields, is a forerunner of the “first style” of Pompeian decoration. The couch in the niche at the end of the tomb is elaborate. It has pillows at each end. This tomb was apparently made for some great Macedonian in early Ptolemaic times. The second tomb, in the garden of the late Sir John Antoniadès, is assigned to “about the end of the first century B.C.” In arrangement it resembles the Greek dwelling-house of the period. The atrium, 5.20 m. square, is approached by a long dromos. Large rooms open to right and left. In front is an apartment 5.40 m. long by 2.10 m. wide. Its greatest dimension is at right angles to the approach. Behind this is a smaller chamber, at the back of which a coiled serpent with raised head is carved. The atrium was lighted from above. The ceilings of the other rooms are segmental vaults. The walls were decorated in three horizontal fields, the space at the top being intended, as at Pompeii, to represent open air. The ceiling decoration represented an awning. The development of the wall decoration is traced from the earliest times (*e.g.* from the palace at Cnossus) to the latest Pompeian style. The serpent here is not the uræus, but “agathodaimon.” (*Zwei Antike Grabanlagen bei Alexandria, untersucht und beschrieben von HERMANN THIERSCH.* Berlin, 1904, Reimer; 18 pp.; 6 pls., 10 figs.; folio.)

Gold Coins from Karnak and Aboukir.—In 1902 about twelve hundred gold imperial coins, from Hadrian to Eligabalus, were found near Karnak, and shortly after near Aboukir about six hundred *aurei*, from Alexander Severus to Constantius Chlorus, were found, together with over twenty Greek gold medallions of the cycle of Alexander the Great, bearing a strong resemblance to those of the treasure of Tarsus. There were also found eighteen gold ingots marked with the foundery stamp. These discoveries are discussed by R. MOWAT in *B. Soc. Ant. Fr.* 1902, pp. 281–286, 287, 308–318. The last article is devoted to the Greek medallions, which seem to have been struck as prizes for the Alexandrian games under the empire. One is perhaps of 243 A.D.

ASIA

The Extent of Ancient Babylon.—The statements of Herodotus and other ancient writers as to the circuit of the walls of Babylon are defended by J. OPPERT against the criticisms of F. Delitzsch. The cuneiform texts

confirm these statements, and nothing in the German discoveries throws any discredit upon them. The recent excavations have only found part of the royal city, with the wall repaired by the Parthian kings, and not the wall of the great city of Babylon. (*C. R. Acad. Ins.* 1903, pp. 611-618.)

German Explorations at Babylon.—The summary account of the German excavations in Babylonia is continued in *Rec. Past* III, 1904, pp. 166-184 (6 figs.). The article contains the reports on the work at the Kasr mound and at Nishan el-aswad in 1901, translations of some of the more important texts, including a portion of a copy of the Behistun inscription, and a brief statement of the first results at Fara in 1902. A somewhat detailed account of these excavations, by A. BOISSIER, is reprinted from the *Journal de Genève*, July 27, August 3, 1903, in *R. Arch.* III, 1904, pp. 119-127.

The Prehistoric Age in Palestine.—The results of recent excavations in Palestine for the prehistoric period are summarized by E. SELLIN in *Mith. Anth. Ges.* XXXIV, 1904, Sitzb. p. 3. In the first place they have pushed back the beginning of the historical period from about 1400 B.C. to 2000 B.C. They have also shown a prehistoric people living in clay huts or caves, brought to light their daily utensils, including flint knives, and revealed something of their religious worship, which included human sacrifices, apparently of the first-born, and also at the dedication of new burial places and of houses.

Marissa.—In *Arch. Anz.* 1903, p. 206, is a report of H. THIERSCH, describing the painted tombs at Marissa. See *Am. J. Arch.* VII, 1903, pp. 89-91.

Bel in Syria.—In the third section of his 'Notes on Syrian Mythology' (*R. Arch.* III, 1904, pp. 205-213; fig.; see *Am. J. Arch.* VIII, 1904, p. 302) R. DUSSAUD discusses the use of the name Bel in Syria. Bel, the god of Nippur, is known in Syria as the name of a solar deity. It is a foreign appellation which is added to or replaces the local name, like Zeus in later times. This is seen with Yarhibôl at Palmyra. It is argued that the armed god on a coin of Ascalon is Bel-Heracles, and that here the name has supplanted the local name, Dagon, who was not ichthyomorphic, but a solar deity.

Syrian River-gods.—In *M. Soc. Ant. Fr.* LXII, 1901 (published 1903), pp. 115-122 (3 pls.), V. CHAPOT describes two monuments of northern Syria. The first, in southern Commagene, on the banks of the Euphrates, is a somewhat rudely executed and much mutilated figure of the river-god, in a semi-recumbent position, carved in the rock. The other, described in 1860, but now photographed, was found near Selucia in Pieria. It is a marble statue of a bearded figure seated on a rock, with the left hand resting on an urn. It may be the Orontes, but Babelon has suggested that it is rather the *Demos* of the city.

The Cave Dwellings of Cappadocia.—The rock-hewn chapels and dwellings near Urgub are described briefly and illustrated by G. E. WHITE in *Rec. Past* III, 1904, pp. 67-73 (7 figs.). They were occupied apparently in the fourth century and later by monks, and the larger churches contain many frescoes, now badly damaged.

Pisidia.—In *Ann. Brit. S. Ath.* IX, 1904, pp. 243-273 (pl.) W. M. RAMSAY discusses Pisidia and the Lycaonian frontier, which is wrongly placed in his *Historical Geography of Asia Minor*. The discovery that Pappa-

Tiberiopolis was at Yonuslar led the author to spend two months in Iconium and revise thoroughly the locations and relations of many cities of Pisidia. A table gives a summary of the chief ancient list of important towns and bishoprics, and the paper treats of the following topics: Antioch Phrygian rather than Pisidian, the *Ξένοι Τεκμήρειοι* who worshipped Artemis Limniotis, Neapolis at Kara-Aghatch, Limnae, Sabinae, Atenia near Monastir, Pappa at Selki-Serai, Siniandus near Kizil-Euren, Prostanna, Malos probably at Male-Kalesi near the Pamphylian frontier, Tityassus at Ivrim-Kalesi, Parlais at Bey-Sheher, Amblada at Assar Dagħ, Vasada at Kestel Dagħ, Misthia at Fasiller, the Homonades a tribe in the mountains about Lake Trogitis, Dalisandus probably near Seida-Sheher, and some examples of double bishoprics.

Didyma.—The results of the French excavations at Didyma in 1895-96 have been published in part by E. PONTREMOLI and B. HAUSSOULLIER. An introduction treats of their predecessors at this site. Their own investigations were confined to a careful and complete excavation of the eastern front, but the records of the building of the temple, and the work of Huyot, Rayet, and Thomas, make possible a restoration of the prodomos, chresmographion, and labyrinths which lay in front of the naos. The temple was an Ionic decastyle, with two rows of columns across the front and at the sides, while in the prodomos were three rows of four columns. On at least two of the capitals the volutes were covered by busts of divinities, probably Apollo and Artemis on one, Zeus and Hera on the other; in the axis of the column, between the busts, was the head of a bull. The frieze bore palmettes and branches with a head of Medusa over each column. This temple, succeeding the one burned in 494 B.C., seems to have been begun about 331 B.C. by the architects Pæonius of Ephesus and Daphnis of Miletus, and their plans were followed throughout its long history, for the construction dragged slowly along until Caligula ordered the province of Asia to complete the work. At that time the columns were set up, and the frieze of the east façade carved. With the death of the emperor the work ceased, and the temple remained unfinished. The importance of the temple as an early monument of the renaissance of Ionic architecture at the end of the fourth century is shown by a detailed examination of the plan of the façade and of its decoration. In conclusion the fragments of archaic sculpture, including an Ionic volute, part of an anta, a marble lion, and some remains of statues, are described. A second volume is to contain a full publication of the accounts of the temple, of which many fragments were found. (*Didymes, Fouilles de 1895 et 1896, par E. PONTREMOLI et B. HAUSSOULLIER.* Paris, 1904, E. Leroux; pp. viii, 212; 20 pls.; 62 figs.; 4to.)

GREECE

ARCHITECTURE

Poros Architecture on the Acropolis at Athens.—At the January (1904) meeting of the Berlin Archaeological Society, R. BORRMAN spoke of T. Wiegand's recently published work on the archaic buildings on the Acropolis (TH. WIEGAND, *Die archaische Porosarchitektur der Akropolis zu Athen.* Cassel and Leipsic, 1904) and his reconstruction of the old temple of Athena beside the Erechtheum. Enough has been found to show just

what the entire building was, including its painted and sculptured decorations, a most important gain, considering how scanty are the remains of old Doric in the home country of Greece compared with those in Italy and Sicily. It was a distyle temple in antis, probably the original hecatompedon, and though it stood substantially as the cella of the Pisistratic temple, enclosed in the new colonnaded structure, yet some of its upper parts at least were removed at that time and built into the pre-Periclean propylaea. The polychrome ornament, like that first found at Olympia, was applied to the prominent decorative members, leaving flat surfaces, columns, and capitals without color. So the sculptures of tympanum and metopes are fully colored, against an unpainted background. Archaic features of the architecture are the absence of a cymatium, the widening of corner metopes, and the shortening of the mutules over the metopes. The pediments contained the group of Heracles fighting with the fish-bodied Triton and watched by the three-headed Typhon, and three seated divinities between the two snake guardians of the citadel. Parts of a smaller and later building show that archaism at Athens was in advance of that in the West in adopting forms that belong to later Doric. Wiegand's publication, with its seventeen plates showing the reconstruction in the original colors, and with explanatory text, must remain the authoritative work on this subject. (*Arch. Anz.* 1904, pp. 63-64.)

The same work is the subject of an article by E. PETERSEN in *Jb. Alt. Ges. L. P.* VII, 1904, pp. 321-328. In addition to a summary of the results of this investigation and brief statement of divergent views, the questions of the relation of the Hecatompædon to the House of Erechtheus and of the position of the ancient statue of Athena are discussed. As the Hecatompædon must have been built about 550 B.C., it cannot have been thought in the fifth century the temple in which Erechtheus had been reared and the wooden image had stood from the earliest times, nor were the western rooms dedicated to Poseidon and Erechtheus. The ancient sanctuary was therefore a cella in the house of Erechtheus, in which the statue was placed, as later in the new sanctuary of Erechtheus and the Polias.

The Original Plan of the Erechtheum. — This subject is discussed by W. DÖRPFELD in *Athen. Mitth.* XXIX, 1904, pp. 101-107 (pl.). He argues that the peculiarities in the present plan of the Erechtheum are due to inability to carry out the original design. The median axis from north to south was to pass through the centre of the great northern door and the door into the Caryatid porch. The temple was to have had a raised western terrace, like that at the east, containing the opisthodomos. The central portion was to consist of the shrine of Poseidon-Erechtheus at the east, a central passage containing the sacred sea with the north porch to contain the marks of the trident, and the Caryatid porch to mark the grave of Cecrops, and a western enclosure containing the Pandroseum and the sacred olive. The building was thus to replace the old Hecatompædon and the temple of Erechtheus. For some reason the western part was never built, and a part of the old temple of Erechtheus remained beside the olive. A fuller discussion with illustrations is to appear later.

The Pergamene Altar. — At the December (1903) meeting of the Berlin Archaeological Society, SCHRAMMER, who has succeeded the late R. Bohn in charge of the reconstruction of the Great Altar of Pergamum, reported on

certain new discoveries of portions of the building and new observations of the parts already known, which establish beyond a doubt that the colonnade did extend across the head of the great stairs, with thirteen spaces, of which the middle one was wider than the others. The view on a coin of Septimius Severus, showing the altar without this colonnade, is probably only a numismatic license. An unfinished portico ran around the inner as well as the outer side of the wall enclosing the altar court, but is supported by piers to which three-quarter columns are attached, instead of by simple columns. The altar rested on four full steps, not on three and a slightly projecting course, as Bohn supposed. There is no reason to doubt the accepted date of the time of Eumenes II (*Arch. Anz.* 1903, pp. 205-206).

The Stage in the Greek Theatre.—In *Athen. Mith.* XXVIII, 1903, pp. 383-436 (fig.), W. DÖRPFELD publishes the first of a series of articles on the Greek theatre in reply to O. Puchstein's book, *Die griechische Bühne*. This article discusses the question of the Greek and especially the Hellenistic stage. It deals largely with details, and this summary includes only the main topics. I. The basis for a restoration of the Greek theatre must be found in recognizing the stages of development. For the early period the evidence is almost wholly literary, and chiefly the extant dramas. For the Hellenistic period there are many ruins, but little literary evidence, though Pollux is now supplemented by several inscriptions. For the Roman period there are many buildings and the exact statements of Vitruvius. This latter writer cannot be used for the earlier periods. II. The Hellenistic theatre is restored from the ruins substantially as in Dörpfeld's book. The upper story of the σκηνή had a number of openings to the roof of the προσκήνιον. There is no evidence for a third story in the σκηνή, and the lower walls are generally too slight to sustain such a weight. III. Puchstein's reconstruction of the Hellenistic theatre is discussed, and declared impossible from the standpoints of technical construction, of the rules of Greek architecture, of the production of ancient dramas, and of the statements of ancient writers. IV. The position of the actor in the Hellenistic theatre is then discussed with reference to Vitruvius V, 2 (does not refer to this theatre), Pollux IV, 123 (σκήνη is not the same as λογέιον), and Plutarch, *Demetr.* 34 (Demetrius entered the orchestra, not the λογέιον). There is no evidence that the actors performed on the roof of the προσκήνιον. V. The chief differences between the Hellenistic theatre and the Graeco-Roman (a better name than Asia Minor) type described with great accuracy by Vitruvius are set forth. VI. A short history of the discussion as to the existence of a stage in the Greek theatre concludes the article.

SCULPTURE

The Vase from Hagia Triada.—In *R. Arch.* III, 1904, pp. 52-73 (pl.), R. WEILL discusses the steatite vase with decorations in relief, found in 1902 at Hagia Triada (see *Am. J. Arch.* VIII, 1904, p. 307). The scene is interpreted as a religious festival by harvesters. Of special importance is the resemblance in profile and head-dress to the paintings at Medinet-Abou, representing the 'Peoples of the Sea.' The vase belongs to the height of Cretan civilization, and represents a race akin to those Carian or Asiatic tribes which assailed Egypt during the twentieth dynasty. These peoples were neither Semitic nor Indo-European. The article contains a state-

ment of the present state of the discussion as to the identity of the tribes named in the Egyptian records.

The Marble Group from Sparta.—In *Athen. Mitth.* XXIX, 1904, pp. 16-20 (fig.), is a discussion by H. von Prott of the marble group, originally published by Marx (*ibid.* 1885, Taf. vi). He interprets it as a birth-goddess, attended by *di nixi*, whose size recalls the Idaean Dactyli. These have been shown by Kaibel (*Gött. Nachr.* 1901, pp. 488 sqq.) to be originally *Phalli*, who also ward off evil, heal disease, and therefore help in child-birth. The names of the three must be uncertain, but at Sparta it is natural to recall the group of Helena between the Dioscuri. A similar pair of deities are Heracles and Asclepius in connection with the cult of Eleusis.

The Athena of Endoios.—J. Six does not agree with the views of Lechat (*R. Ét. Gr.* V, 1892, pp. 385-402; VI, 1893, pp. 23-32; *Au Musée de l'Acropole*, pp. 415-441) as to the Athena of Endoios. The restoration of the seated marble statue is given by the terra-cotta plaques representing a young girl (Athena) spinning (*J.H.S.* XVII, 1897, p. 306). That this was the character of the statue of Endoios is rendered probable by Pausanias, VII, 5, 9. The statue on the Acropolis was earlier than the Persian invasion, and the donor, Callias, was perhaps the husband of Elpinice. (*R. Arch.* III, 1904, pp. 92-96.)

The Dress of the Acropolis Statues.—Actual experiment with a model proves that it is possible to make, from the overfold of a rectangular garment, the sort of short drapery that hangs in zigzag folds diagonally across the breast and back of the archaic draped figures on the Acropolis; hence it is not at all probable that this represents a separate garment. The artist has of course varied from actual fact in emphasizing certain details of the appearance and disregarding others, just as he treated the anatomy of nude figures and the arrangement of hair at the same epoch. The dress represented must be the light Ionic robe of linen rather than the woollen peplos, as wool would not take such folds. (J. H. HOLWERDA, *Jb. Arch. I.* XIX, 1904, pp. 10-14; 7 cuts.)

The Date of the Hermes of Alcamenes.—The decidedly archaic character of the Hermes of Alcamenes, of which a Roman copy has been found at Pergamum, together with the fact that the lower structures of the Mnesiclean Propylaea at Athens, before which the Hermes stood, were built before the Parthenon was begun in 447 B.C., makes it probable that the Hermes itself was of the very beginning of the second half of the century. If this is so, there was an Alcamenes active in the middle of the fifth century, an equal contemporary rather than a pupil of Phidias, and this supposition harmonizes excellently with the archaic character of the sculptures of the west pediment at Olympia, which Pausanias attributes to Alcamenes, and which the Hermes certainly resembles in some points. (G. LOESCHCKE, *Jb. Arch. I.* XIX, 1904, pp. 22-25; fig. *Arch. Anz.* p. 76.)

The East Pediment at Olympia.—A contribution to the long discussion as to the arrangement of the figures in the eastern pediment of the temple of Zeus at Olympia is made by A. FURTWÄGLER in *Sitzb. Mün. Akad.* 1903, pp. 421-438 (4 figs.). The new order differs from that proposed by Treu (*Olympia* III, Taf. 18-21) in three particulars. The kneeling maiden, the kneeling boy, and the boy playing with his toes are placed

in the positions assigned to them by Curtius (*Olympia*, Textband III, Taf. i, 2). The kneeling youth at the horses' heads is turned so as to present the right side and back to the spectator. This arrangement is defended by arguments drawn from the pairing of figures of equal height, the working of the surface of the individual statues, and the general symmetry in the composition thus produced. No names are to be assigned to any figures, except those of the central group and the charioteers. The others are attendants.

The East Pediment of the Parthenon.—Giving up the ill-founded attempts at allegorical explanation, and taking the simple ground that the witnesses of the event at the Olympic end of the temple are, like those at the terrestrial end, confined to beings on an equality with the chief actors, we must find present at the birth of Athena only the twelve great gods. They were probably grouped in pairs, and are further to be identified by comparison with the same divinities in the frieze and metopes (gigantomachia) below them. Thus we find Dionysus in the reclining figure at the left end, and Core and Demeter (not two of the Horae) in the closely united women next him. These two figures are seated, not on chairs or stools, but on low, covered boxes, such as are given in Attic art only to these Eleusinian goddesses and which represent the *cistae mysticae*. Zeus also is on the left, and on the right, Athena, Hephaestus, perhaps Apollo, and at the end, Dione and Aphrodite. It is perhaps not accident that the actual sanctuaries of the gods, so far as they existed in the neighborhood, were similarly placed to the right and left. (F. STUDNICZKA, *Jb. Arch. I. XIX*, 1904, pp. 1-10; pl.; 7 figs.)

Statues from the Pediments of a Greek Temple.—In *Sitzb. Mün. Akad.* 1902, pp. 443-455 (2 pl.; 2 figs.), A. FURTWÄNGLER adds another statue at Ny Carlsberg to the two which he earlier showed must have come originally from a Greek temple (*ibid.* 1899, pp. 279 sqq.; see *Am. J. Arch.* V, 1901, p. 232). This is a standing figure of Apollo Citharoedus, wearing a long thin tunic, a heavier short tunic, and a mantle which falls behind the figure away from the back as though blown by the wind, a peculiarity also observable in the female figure earlier described. The style is rather Ionic than Attic, and the date is about 450-440 B.C. This figure probably belonged to the east pediment of an Apollo temple, the other two figures, from a slaughter of the Niobids, to the west. The dimensions of the figures show that the pediments were exactly the size of those of the Theseum. The bases of the statues do not however agree with the traces on that building.

Sculptures from Epidaurus.—In *Sitzb. Mün. Akad.* 1903, pp. 439-446 (2 pls.; fig.), A. FURTWÄNGLER discusses a fine statue of a fallen youth which formed part of the pediment decoration of the temple of Asclepius. The upper part of the figure rests on the back, the lower on the right side with the left leg thrown forward over the right, and the consequent distortion of the lower part of the abdomen has been rendered in a masterly fashion. It is far superior to the fallen Niobids of Florence and Copenhagen. Another fragment from this temple is the flying Nike (No. 162 of the Athenian Museum), which formed the central Acroterion of the east pediment, and may fairly be regarded as the work of Timotheus. The other Nike and the so-called Nereids were the western Acroteria.

Strongylion. — This artist, a contemporary of Cephisodotus, lived in the period between Phidias and Praxiteles. The coins of Megara and Pagae show the statues of Artemis made by him for those cities, and it is probable that he adapted to Artemis the costume which his predecessors had given to the Amazons. The Artemis of Anticyra by Praxiteles is obviously influenced by this type. A small statue of Artemis from Metelin (Lesbos) now at Constantinople (see *Am. J. Arch.* 1885, pl. ix) recalls the Berlin Amazon (Polycletus), but has also a Praxitelean character. The original of this Artemis can scarcely in the present state of our knowledge, or ignorance, be attributed to any other artist than Strongylion. (S. REINACH, *R. Arch.* III, 1904, pp. 28-39; 2 pls. See *Am. J. Arch.* VII, 1903, p. 465.)

Damophon and the Lycosura Sculptures. — It has become the fashion to deny or neglect the fourth-century date given by Pausanias and accepted by Brunn for the sculptures by Damophon at Lycosura; but no later date that has been proposed satisfies the facts nearly so well. A much inferior colossal head of a goddess at Rome, attributed to the same sculptor, is indeed an outgrowth of the style shown in the Lycosura heads, but is itself late fourth-century. The designs on the richly carved drapery are full of local color, and where they use motives not uncommon in decoration, treat them as new and interesting, not mechanically, as did the third and subsequent centuries. The socle of the temple and the basis of the statues, with the statues themselves consequently, are contemporary with, and similar in construction to, the main wall of the Thersileum at Megalopolis and to its first reconstruction. All these indications point to the latter half of the fourth century, when the great demand made upon the artists of the western Peloponnesus in building Megalopolis and restoring Messene had slackened somewhat and allowed the less important places like Lycosura to claim their matured services. (A. M. DANIEL, *J.H.S.* XXIV, 1904, pp. 41-57; 6 cuts.)

The Heracles of Lysippus. — At Tarentum was a colossal bronze statue of Heracles, the work of Lysippus, which was carried to Rome, and later apparently to Constantinople. The hero was seated on a basket over which was spread the lion's skin. He was without weapons, and supported his head on his left hand. A copy of this statue seems preserved in a Byzantine ivory relief on a coffer at Xanten. The motive is old, but its transference into sculpture in the round seems due to Lysippus. The basket and absence of weapons shows that Heracles is resting after cleaning the stables of Augeas. The statue must have resembled the bronze pugilist at Rome, which also belongs to the school of Lysippus. (A. FURTWÄNGLER, *Sitzb. Mün. Akad.* 1902, pp. 435-442; fig.)

The Aphrodite of Melos. — In *Sitzb. Mün. Akad.* 1902, pp. 456-461, A. FURTWÄNGLER again discusses the discovery of the Aphrodite of Melos, with reference to documents published by Michon. (*R. Ét. Gr.* 1902, p. 11 sqq.; see *Am. J. Arch.* VI, 1902, p. 468.) The statue was found in a niche in the gymnasium of Melos dedicated to Hermes and Heracles. The two herms found in the same niche are both earlier, and unconnected with the statue. The Poseidon, now in Athens, while a work of the same period, has nothing to do with the Aphrodite, and was found in a wholly different place, a sanctuary of Poseidon. (See *Am. J. Arch.* VII, 1903, pp. 239, 466.)

The Kneeling Figure from Anticythera. — The marble statue from Anticythera, representing a youth kneeling on his right knee, and resting

the knuckles of the right hand on the ground, while the face looks upward and the left arm seems to have been raised, is interpreted by G. NICOLAÏDES in 'Εφ' Ἀρχ. 1903, coll. 201-206 (pl.; fig.), as part of a group representing the slaying of Lycaon by Achilles, in close dependence upon the Homeric description (Φ, 64-113).

The Barberini Faun.—The restorations of the Barberini Faun have been recently discussed by Bulle and Habich in *Jb. Arch. I.* XVI, 1901, pp. 1-18, and XVII, 1902, pp. 31-39. An additional note is contributed by E. MICHON in *B. Soc. Ant. Fr.* 1902, pp. 331-336. He uses the copy in the Louvre made by Bouchardon in 1732, where the tree behind the faun is treated with much detail, being provided with garlands and branches one of which projects above the rock on which the satyr reclines. This seems to have been the piece removed in 1818 in order to enable the figure to be seen from all sides.

Apollo on the Omphalos.—A small statue of Apollo seated on the Omphalos, now in Alexandria, is discussed by A. J. B. WACE in *Ann. Brit. S. Ath.* IX, 1904, pp. 211-242 (pl.; 5 figs.). The type is rare, and this seems the only example in the round. The article contains a list of occurrences on reliefs, vases, and coins. Among the latter those of the Seleucidae are prominent, and the original of this type is sought in a statue in the square, δ ὀμφαλός, at Antioch. The statue is dated at the end of the third century B.C., and joined with the Tyche and Aphrodite with a Triton as an example of Seleucid art. These conclusions lead to a discussion of the art of the "Hellenistic" period, though the author disowns the adjective, and prefers a division by periods, or centuries, from 323-220, 220-133, and 133-30 B.C. He objects to regarding Alexandria as the source of the reliefs or *toreumata*, as claimed by Schreiber. He argues that the art of this period is essentially cosmopolitan, and that the study of dated coins shows a general, not local, tendency in the art of the third century to become soft, while in the second this is succeeded by a wave of naturalism. In conclusion he gives some reasons for believing that the "Hellenistic" relief sculpture arose in Asia Minor, and migrated thence to Italy. The article is preliminary to a detailed study of the art of this period.

The Medusa Rondanini.—The Medusa Rondanini has recently been detached from the modern plaque which forms its background. The marble of the mask is solid, and it has never had a pedestal, but has been suspended from a wall. The photographs of the head are all taken from too high a point and foreshorten the lower part of the face. A new photograph shows better its true value. (J. SIEVEKING, *R. Arch.* III, 1904, pp. 151-152; fig.)

Some Greek Portraits.—In *J.H.S.* XXIV, 1904, pp. 81-98 (3 pls.; 4 cuts), K. A. McDOWELL makes four identifications of extant portrait heads as Aeschylus, Agathon, Aeschines, and Demetrius Phalereus. The first, representing a fifth-century poet in a style closely resembling the Lyeurgan Sophocles of the Lateran, is known in five copies, of which the best are a bronze at Florence and a marble at Naples. They express the stern, discontented, fiery warrior-poet as perfectly as the Lateran statue does the ideal character of Sophocles. The original was probably the Aeschylus of the group set up by Lyeurgus in 340 B.C., which had been replaced in the theatre at Athens by a later figure before the time of Pausanias and had probably been carried to Rome. The half-nude figure holding a mask, which goes by

the name of Euripides, is probably the body to which the head belongs. A poor copy at Bonn of the head of a fifth-century poet, with soft, scanty hair and closely-cut beard, expresses exactly the character of the lovable and beautiful, rather than forceful, poet Agathon. It is appropriately united in a herm with Euripides. A marble bust from the villa of the Pisos, now at Naples, represents an old man with deeply furrowed brow, but otherwise closely resembling the expressionless heads known as Aeschines. It seems to show the same man in his more advanced years and with far greater life-likeness. A marble head at Florence, which represents a very young man of striking beauty and great force of character, has been called Alcibiades, because of the extreme rarity of honoring young men with portraits. It is, however, a century too late in style for him, and is much more satisfactorily explained as Demetrius Phalereus. When Demetrius Poliorcetes drove him from Athens in 307 B.C. and destroyed the countless statues that had been erected to him in all parts of the city, he had one set up on the Acropolis, and it is not at all improbable that he employed the same artist, Tisicrates, successor of Lysippus, who had made his own statue. The style of this head would bear this out.

An Attitude of Prayer. — A relief of a boy praying with both hands raised above his head, found by the French at Nemea in 1884 and published in *Rev. Arch.* 1903, is to be compared with an almost exactly similar figure on a gem at Berlin, and probably should give the clew for the restoration of the bronze Praying Boy at Berlin. (A. CONZE, *Arch. Anz.* 1904, p. 75; 2 figs.; cf. *Am. J. Arch.* VII, 1903, p. 239.)

VASES AND PAINTING

Attic Vases with Animal Friezes. — Under this title, in *Jb. Arch. I.* XVIII, 1903, pp. 124-148 (pl., 14 cuts), M. P. NILSSON discusses in detail, and in relation to earlier wares, the six vases found at Vurvá in eastern Attica and a number of allied pieces from Marathon, Eleusis, and other places in Attica and at Eretria. The first, which are the oldest and which derive their Eastern characteristics through Eretria, he considers of local fabric and of about the middle of the seventh century B.C., though the style may have continued for a century later. Those which have human figures and chariot teams along with the usual panthers, sirens, etc., are of course later. Eleusis shows a mixture of Corinthian and Attic elements.

The Chest of Cypselus. — In *Jh. Oesterr. Arch. I.* VII, 1904, pp. 126-139 (fig.), F. WINTER argues at length in support of Pernice's view (*Jb. Arch. I.* 1888, p. 366) that Pausanias in his description of the chest of Cypselus erred in describing Heracles as present at the funeral games of Pelias. This figure was really Halimides and belonged to the departure of Amphiaraus. Pausanias was probably misled by a damaged inscription. The woman playing on the Phrygian flutes was probably a woman holding up a dish, and likewise belonged to the Amphiaraus scene.

The Growth of the Athenian Vase Trade. — It is well known that during the sixth century B.C. the products of the Athenian potteries gradually supplant in Italy those of Chalcis, Corinth, and other Greek states. This is partly due to the interruption of Greek trade by the Etruscans. Athens, however, did not send her own ships to Italy, nor is Helbig's view probable that the goods were transhipped at Syracuse, for black-figured

Attic vases are not common in Sicily. It is more likely that the Etruscans themselves brought their bronze to Piraeus, and took back Attic oil and wine in Attic vases, and also other vases for the use of the wealthy. It must not be forgotten that Greek vases were for practical use. (E. POTTIER, *R. Arch.* III, 1904, pp. 45-51.)

The Proportions of the Human Figure on Attic Vases.—In *R. Arch.* III, 1904, pp. 214-221, is printed a chapter from the forthcoming Vol. III of the *Catalogue des Vases du Louvre* by E. POTTIER, in which the author discusses the proportions given the human figure by the Athenian potters. He protests against the ordinary use of Doric and Ionic in describing tendencies in Greek. The Mycenaean art gives its human figures long and slender proportions, and the same tendency is manifested in the geometric period, on the islands and in Greece until the seventh century. In Ionia a contrary tendency toward short muscular figures is obvious, and this is strong in Greece during the early sixth century. The earlier Attic vases show the long proportions; the Attico-Corinthian the very short, *e.g.* 5 or even $4\frac{1}{2}$ heads in height. The François vase, Amasis, and Execias return to the earlier rule, and finally with Nicosthenes and his contemporaries the norm of six or seven heads is established. This mediation between the extreme tendencies is held to be characteristic of Attic art. The Dorian influence in art is the introduction of simplicity, symmetry, and attention to the individual.

Andromeda.—The Andromedas of Sophocles and Euripides, in connection with the Latin versions of the story and with vase-paintings, are discussed by E. PETERSEN in *J.H.S.* XXIV, 1904, pp. 99-112 (pl.). While most of the vases come from southern Italy and give the version of Euripides, a hydria from Vulci (Brit. Mus. E. 69) is earlier than the known date of that play, and must be based on that of Sophocles. This is the simpler in the stage devices, having Perseus enter on foot during the preparations for the exposure instead of flying in upon Andromeda's opening lament. Possibly the play is of about the time of the Antigone (441 B.C.), which it somewhat resembles, and earlier than the Alcestis of Euripides (438 B.C.), in which the motive is a similar unselfish sacrifice.

More Illustrations of Aesop.—In *Jh. Oesterr. Arch.* I. VII, 1904, pp. 72-81 (4 figs.), L. SAVIGNONI publishes two more illustrations of the fable of the fox and the crane. One, a hydria, shows the crane's banquet to the fox; the other, a guttus, shows the crane flying and the fox running. It is probably the closing scene. Both vases were found in a tomb at Corchiano, and are Faliscan ware of the fourth or third century B.C. A somewhat lengthy discussion follows on the reasons for choosing this fable for sepulchral monuments. It is regarded as a symbolic expression of the uncertainties of life, and of the thought in the common epitaph, *quod tu es, ego fui; quod ego sum, tu eris.*

INSCRIPTIONS

The Oldest Greek Letter.—R. WÜNSCH in his *Defixionum Tabellae Atticae*, p. II, published a Greek letter of the fourth century inscribed on a folded lead plate, found at Chaïdari in Attica, and now in the Berlin Museum. It is the oldest Greek letter preserved in its original form, but the text calls for further study, which is given by A. WILHELM in *Jh. Oesterr. Arch.* I. VII, 1904, pp. 94-105 (2 figs.). The address reads, *φῆρεν ἰς τὸν*

κέραμ|ον τὸν χυτρικόν. | ἀποδοῦναι δὲ Ναυσίαι | ἣ Θρασυκλῆι ἣ θ' νίωι. The text of the letter is discussed in detail and restored as follows: Μνησιέργος | ἐπέστειλε τοῖς οἴκοι | χαίρειν καὶ ὑγαίνειν | καὶ αὐτὸς οὕτως ἔφασ[κ]ε [ἔχεν·] | στέγασμα εἴ τι βόλεσθε | ἀποπέμψαι ἣ ὥς ἣ διφθέρας | ὥς εὐτελεστά(τα)s καὶ μὴ σισυρωτάs | καὶ κατόματα: τυχὸν ἀποδώσω. The letter is of the early fourth, possibly even the late fifth century. The opening formula with its good wishes for the receiver and information about the writer has remained a characteristic of the Greek letter to the present time, and seems to have been borrowed by the Latin.

Lead Tablets with Curses. — Wunsch (*Defixionum tabellae Atticae*, p. I) and Schwyzler (*Jb. Alt. Ges. L. P.* 1900, p. 246) hold that the great body of the lead tablets with curses found in Attica belong to the third century B.C., and but few to the fourth. Against this dating is directed a discussion by A. WILHELM in *Jh. Oesterr. Arch. I.* VII, 1904, pp. 105–126 (10 figs.). The article examines the details of writing and language with a view to showing that many of these cannot be used to prove late dates, but rather point to the fourth century, and also connects a number of names in these tablets with persons known through inscriptions or literature.

Ibid. pp. 141–145, R. MÜNSTERBERG contributes some notes on these tablets. The lead, at first used as a convenient writing material, later becomes symbolic of what is desired for the enemy cursed. Similarly the writing from left to right, perhaps originally the preservation of the earlier form, later accompanies a prayer for the reversal of the enemy's plans. The custom is certainly far older than the earliest tablets, which are of the beginning of the fourth century. They are not intended to kill the adversary, but to render him powerless in tongue and thought, or hands and feet.

Greek Victors. — In *Athen. Mith.* XXVIII, 1903, pp. 338–382, E. PREU-
NER discusses a number of inscriptions containing lists of victors in Greek games. The first is from Oropus, *C.I.G.* VII, 414, for which is given a careful restoration of the first six lines, and a discussion of the date, which cannot be exactly determined, but is earlier than 338 B.C., and probably about 360–350 B.C. Charias the victorious αἰλωδός seems to be the dedicator of a statue by Praxias, whose other inscriptions are of this period. If the victor Satyrus of Elis is the victor at Olympia, whose statue was the work of Silanion, the date agrees with that assigned to this artist by Michaelis. Secondly, the seven lists from Samos are catalogued and discussed, including a new fragment. The discussion is an endeavor to determine the order of these inscriptions and their probable dates, chiefly through prosopographical studies. They all seem to belong to the second century B.C. Thirdly, six lists from Larisa are dated. The first two refer to the Eleutheria, one being not very long after 196 B.C., the other about 112–80 B.C. The other four refer to local games, and from minute examination of the indications seem to belong in early imperial times. The families of Cyllus of Hypata, Androsthenes and Themistogenes of Gyrtion or Larisa, and of Amometus and Philoxenides of Larisa are discussed.

Spartans in the Parthian Wars. — In the National Museum at Athens is a relief from Sparta with the inscription Μάρκος Αὐρήλιος Ἀλέξιος Θέωνος στρατευσάμενος κατὰ Περσῶν ἔτη βιώσας λ'. The relief shows a Roman warrior, but with a *pilos* instead of a helmet, and with a club in his right hand. It seems probable that the monument refers to the Parthian

expedition of Caracalla, who raised a Macedonian phalanx and a Laconian *lochos*. The latter troops may well have been equipped with *pilos* and club, which were traditional for Arcadians. If this is correct, other Spartan inscriptions mentioning service *κατὰ Περσῶν* probably refer to this expedition. (P. WOLTERS, *Athen. Mitth.* XXVIII, 1903, pp. 291-300; fig.)

The παιδικὸς ἄγων at Sparta.—To the dedications made to Artemis Orthia at Sparta (*Athen. Mitth.* 1897, pp. 334-342; *Am. J. Arch.* II, 1898, p. 298) M. N. TOD adds a new one in *Athen. Mitth.* XXIX, 1904, pp. 50-56. The inscription refers to a victor in τὸ παιδικὸν καθηρατόριον, thus confirming Baunack's explanation (*Rhein. Mus.* XXXVIII, 1883, p. 293) of *κασσηρατόριον*. The article argues that while some of the inscriptions refer to the musical contest, this and others indicate a *θηρομαχία* of some kind, probably a *ταυροθηρία*, for which some new evidence is presented.

An Epigram from Tegea.—The fragmentary epigram from Tegea (*B.C.H.* XXV, 1901, p. 271; *Am. J. Arch.* VII, 1903, p. 379) is briefly discussed and a new restoration proposed by A. WILHELM in *Athen. Mitth.* XXIX, 1904, pp. 108-109. He doubts whether it is connected with the Arcadian invasion of Laconia under Epaminondas.

Thessalian Inscriptions.—In *Athen. Mitth.* XXIX, 1904, pp. 110-111, H. S. publishes two corrected readings of Thessalian inscriptions from notes of G. D. Zekides. The inscription published by Kern (*Inscriptionem Thesalicarum antiquissimarum sylloge*, No. 18) is to be read Ἄπ[λων] Λεσχάο | Ἀριστίον ὀνέθεκε κοι συνδανναφόροι. In the metrical epitaph from Larisa (*Athen. Mitth.* 1886, p. 451) the stone has in line 8 πλέον and not πᾶσιν, thus confirming a conjecture of Rohde (*ibid.* 1887, p. 141).

An Inscription from Astypalaea.—In *Athen. Mitth.* XXVIII, 1904, pp. 449-450, A. WILHELM publishes some corrections and restorations of the honorary inscription from Astypalaea, *C.I.G.* XII, 3, No. 171.

A List of Cretan Cities.—In *Athen. Mitth.* 1893, p. 10, No. 7, was published an inscription from Andros, which the editor, E. Pernice, interpreted as a list of Cretan cities. *Ibid.* XXVIII, 1903, pp. 462-464, HILLER VON GÄRTRINGEN publishes a revised text (*C.I.G.* XII, 5, No. 723) showing that only the first two columns contain Cretan names, the other three being the names of islands or cities of the Aegean coast. It seems to be part of an inscription showing the places which had recognized the rights of some sanctuary on Andros. *Ibid.* XXIX, 1904, p. 111, H. S. publishes from a note of R. C. Bosanquet the suggestion that the Ἀύττιοι πρὸς θαλάσση must be the inhabitants of Chersonesus, mentioned by Strabo as the port of Lyttus.

An Archaic Inscription from Paros.—In *Jh. Oesterr. Arch.* I, V, 1902, pp. 9 ff. (see *Am. J. Arch.* VI, 1902, p. 475), Hiller von Gärtringen published a fragmentary archaic inscription from Paros, which he restored as a trochaic tetrameter and interpreted as erotic. His conclusions are traversed by A. HAUVETTE in *B. Soc. Ant. Fr.* 1903, pp. 235-240 (fig.), who regards it as an iambic trimeter from a funeral monument. He proposes [Προ]ίτης μ' ἔ[γραψεν] Εὐπάλω[ι] χά[ριν] φέ[ρων]. Possibly instead of μ' ἔγραψεν we should read a patronymic or ethnic beginning with Μελ.

The Oligarchy on Thasos.—In *Athen. Mitth.* XXVIII, 1903, pp. 437-448, A. WILHELM discusses the Thasian inscription first edited by E. L. HICKS in *J.H.S.* VIII, p. 401. While the restorations of Hicks are not

satisfactory, since the lines had forty letters each and not thirty-six, his general interpretation is certainly correct. The decree refers to the establishment of the oligarchy by Dietrephes in 412-411 B.C., and the return of the exiles (Thuc. VIII, 64). The first five lines still baffle conjecture, but a restored text of the rest is given and a somewhat full justification of the readings proposed.

Notes on Pergamene Inscriptions.—In *Athen. Mitth.* XXIX, 1904, pp. 73-78, B. KEIL publishes some notes and corrections on the two long inscriptions from Pergamum (*ibid.* 1902, pp. 78 sqq.; *Am. J. Arch.* VII, 1903, p. 110). Two passages in the rescript concerning the money-changers are discussed at length, and three from the police ordinance.

The Pontarchs of Lower Moesia.—The confederation of the Greek cities on the western shore of the Black Sea south of the Danube, with its chief official, the *Ποντάρχης*, is the subject of a discussion by J. TOUTAIN in *M. Soc. Ant. Fr.* LXII, 1901 (published 1903). He collects the inscriptions referring to the Pontarch, and also those mentioning the priest of the province. The Greek *κοινόν* continued to exist in Roman times but did not coincide with the province, nor is there any evidence that the Pontarch was also *ἀρχιερεύς*. Such titles as the Asiarch, Boeotarch, Bithyniarch, etc., may in some cases belong to the priests of the provinces, as is probable in Asia, but each district requires a special investigation.

GENERAL AND MISCELLANEOUS

The Plain of Sparta.—Pausanias's description of the Spartan plain is examined by H. VON PROTT in *Athen. Mitth.* XXIX, 1904, pp. 1-15 (pl.). The route from Therapne toward Taygetus and then southward is carefully traced in detail. Curtius is wrong in placing the Eleusinion at Anavryti, Lapithaeum, and Harpleia near Parori and Mithra. A study of the topography and the ancient remains indicates that the sanctuary of Zeus Messapeus was near the present chapel of St. George, Bryseae and the Eleusinion near Katyvia Sochiotika, with Taleton the fortified height just above, Lapithaeum and Derium near Anagia and Sotira, and Harplia at Xerokambo. The Homeric city, Phasis, seems to have been on the hill now marked by the chapel of St. Basil between Trapezondi and Kydonia.

Delphi.—At the November (1903) meeting of the Berlin Archaeological Society, H. DIELS, who had visited Delphi the previous spring in company with the late H. von Prott, explained the inconsistency between the existing remains of five temples on the road from Marmaria, the eastern suburb, with Pausanias's mention of only four, by supposing that in the second century of our era the two easternmost, the temple of Athena Ergane and the small one next it, were already fallen in a mass of ruins which the hasty traveller did not distinguish as two buildings. (*Arch. Anz.* 1903, p. 203.)

Ionian Art at Delphi.—The treasury of Cnidos and the monuments of Ionian art at Delphi are discussed by J. T. HOMOLLE in *J. Brit. Arch. Ass.* XI, 1904, pp. 29-41 (pl.; 11 figs.). After a brief account of the excavations, the treasury is described in detail, and its importance as a certain product of Ionian art emphasized. The characteristics of its architecture and sculpture are the same as those of the monumental works from Ephesus, Branchidae, and Naxos, while they reappear at Delphi in the scanty remains of the treasuries of Phocaea in the Marmaria, and of Clazomenae. The

column of the Naxians and numerous lesser votive offerings also show the great importance of Delphi in the history of Graeco-Oriental art of the seventh and sixth centuries. The plate gives a restoration of the east front of the treasury.

Leucas-Ithaca.—W. DÖRPFELD's rejoinder to U. von Willamowitz's criticism of the identification of Leucas with the Ithaca of the pre-Dorian parts of the Homeric poems, originally intended for presentation six months earlier, was communicated to the Berlin Archaeological Society at the January (1904) meeting and is published in full in *Arch. Anz.* 1904, pp. 65-75. That the author of the latest parts of the Ship Catalogue knew only the post-Dorian arrangement of populations and names is evident; but all the descriptions and facts relating to the four large islands of the story correspond so fully and satisfactorily with the positions and characters of the four actually existing, that to deny their identity—Leucas-Ithaca, Ithaca-Same, Cephallenia-Dulichium, Zante-Zacynthus, with Cephallenia on the mainland—is possible only by a blind adherence to the tradition of centuries and a resort to such arguments as that the author of the *Odyssey*, being an Asiatic, knew the scene of his story only by hearsay and imagination. The corollary of Dörpfeld's harmonizing story and fact is that the poem is essentially pre-Dorian and belongs to the mother country, having been carried to Asia Minor, like the *Iliad*, as an heirloom. A large pre-Dorian settlement and water system has been found by the excavators at Leucas.

Carpathus.—In the summer of 1903, R. M. DAWKINS, of the British School at Athens, visited the island of Carpathus, and in *Ann. Brit. S. Ath.* IX, 1904, pp. 176-210 (13 figs.), he publishes the first instalment of his notes. After a summary of the existing information, ancient and modern, as to the island, he describes in some detail the modern conditions. Two forms of wooden lock are in use, closely resembling the "Laconian" and "Parian" types of Diels. The law of inheritance is somewhat complicated, but the dowry of the wife always passes as dowry to her eldest daughter, or failing an heiress, to her second son, who must bestow it as a dowry on his second daughter. The property tends to pass into the female line, and once there cannot be alienated, and the old people sink into poverty since their property has passed into the hands of their children. Ancient remains are scanty, but the sites of Arcaseia and Poseidion, though much pillaged, are still clearly marked. Nisyros, mentioned by Strabo, was perhaps on the island of Saria. The remains at this site, τὰ Παλάρια, are mediaeval, and such ruins are numerous on Carpathus. A mediaeval fortress at Spoa is briefly described.

Excavations at Cnossus.—*Ann. Brit. S. Ath.* IX, 1904, pp. 1-153 (3 pls.; 92 figs.), contains a detailed account of the discoveries at Cnossus in 1903. (See *Am. J. Arch.* VII, 1903, pp. 374-375.) Besides detailed accounts of the "stepped theatral area," northwest house, royal villa outside the palace, and especially the important shrine with the images of the snake-goddess, a female votary and several votive robes, as well as of the pottery and smaller objects found in this work, the report describes a well-preserved group of rooms, forming a small house in the southeastern part of the palace area, and a series of deep walled pits in the northwestern part, which seem to have been filled before the later palace was built, as they yielded only Middle Minoan potsherds.

Excavations at Palaekastro.—The results of the second campaign of the British School at Palaekastro have been summarized in *Am. J. Arch.* VIII, 1904, p. 105. *Ann. Brit. S. Ath.* IX, 1904, pp. 274–387 (8 pls.; 46 figs.), contains the detailed report. R. C. BOSANQUET gives an outline of the work, and then discusses the town, the chronology of Palaekastro and Zakro, and one block of the houses. The remainder of the houses and the pottery are described by R. M. DAWKINS. The excavation at Kouraménos of the group of houses, forming apparently a Mycenaean farmstead, is treated by R. M. DAWKINS and M. N. TOD, and the latter also reports trial excavations at Hagios Nicolaos, in search of the sanctuary of Dictaeon Zeus. Here remains of Mycenaean houses were found, and in three caves the remains of burials of the early bronze age. The human remains found here and in the ossuaries of Roussolakkos, are studied by W. L. H. DUCKWORTH, who finds the race prevailing dolichocephalic, though brachycephalism is not unknown. The stature was small, and in general these primitive Cretans seem to be the earliest representatives of the “Mediterranean race.”

The early sanctuary at Petsofà is described by J. L. MYRES. Under remains of the Late Minoan or Early Mycenaean period was found a thin layer of black earth full of ashes and fragments of figurines. These consist of male and female standing and sitting figures, also large images of oxen, and small images of many varieties of animals, including apparently weasels and hedgehogs. The male standing figures wear high boots and the loin-cloth, which here consists of three parts, the loin-cloth proper, a kilt, and a girdle. In many cases a large dagger is also worn. The women wear the usual full skirt, open bodice, and frequently hats of curiously modern shapes. This Aegean costume and its analogies in the skirt and bodice of Northern Europe are discussed and attributed to a very early community of culture. Crete here, as elsewhere, appears as a European outpost in chalcolithic, if not neolithic, times. The costume seems to have survived even in Greek lands, in spite of the general prevalence of the “Doric chiton” of North Africa, and the “Ionic chiton” of Hither Asia.

The Moulds of Palaekastro.—In *Ἐφ. Ἀρχ.* 1903, coll. 187–200, S. A. XANTHOUDIS discusses the two moulds from Palaekastro in Crete, first published by him *ibid.* 1900, coll. 26–50. (See *Am. J. Arch.* V, 1901, p. 241.) After defending his view that the plaques are a workman’s moulds and not sacred objects, he modifies his earlier interpretation in view of recent discoveries in Crete. One plaque shows on one side the great Cretan goddess in a peaceful aspect with a flower in each hand and one springing from her head. On the other side are images of the sun and moon and the horns of consecration. The other plaque shows the goddess as warlike, with the double axe in each hand, while on the reverse are a large and a small axe. It is suggested that the combination of the horns and the double axe in other Mycenaean objects is due to a custom of placing the head of a sacrificial victim and the instrument of sacrifice on the altar of the god.

Divinities holding Temples.—Certain coins show the figure of a divinity holding in the hand a temple, which has been interpreted as the model of a new building and connected with the Neocoria. A new examination of the representations is made by B. PICK in *Jh. Oesterr. Arch.* I. VII, 1904, pp. 1–41 (41 figs.). The cities issuing these coins are Smyrna, Lesbos,

Nicomedia, Perinthus, Ancyra, Tarsus, Philippopolis, Colybrassus, Aegeae, and Side. A detailed examination of these coins in comparison with the other issues of the ten cities shows that while these figures sometimes appear in connection with the foundation of a new temple of the emperor or some divinity, they also appear long after such events. These temples are seldom models in a strict sense, but always copies of actual buildings. The coins extend from the time of Domitian to that of Gallienus. A second article is to discuss representations of the Neocoria on the coins of other cities.

Gravestones in the Form of Altars.—Tanagra Museum contains many gravestones in the form of altars, of many periods, and in some cases found inside the graves. All seem to have had an engraved or painted inscription on the front. Two chief classes can be distinguished. One has a low step in front and a wind shield on three sides, thus resembling a seat. The other has a slight depression in front, and a low edge about a slight depression on top. Developments in both forms can be traced by the inscriptions. Other forms are plain cubes with a flat slab on top, and apparently sacred tables, formed of slabs supported on low stones. (F. PFUHL, *Athen. Mith.* XXVIII, 1903, pp. 331–337; 6 figs.)

The Hippalectryon.—P. PERDRIZET does not agree with the views of Lechat on the hippalectryon (*Au Musée de l'Acropole d'Athènes*, p. 453). Aeschylus is not said by Aristophanes (*Ran.* 930–938) to have introduced this monster into his plays, and it was known to Attic artists at a much earlier date. It had a magic, apotropaeic quality, and for this reason appears on the vases, and was probably chosen for the votive offering on the Acropolis. Its origin is not to be sought in Oriental art, but rather in Ionia, where survived the Mycenaean tendencies toward strange combinations of human and animal forms. A list of twenty examples is given, of which sixteen are Attic. The Attic hippalectryon has a rider, the Ionic does not. (*R. Ét. Anc.* VI, 1904, pp. 7–30; pl.; 7 figs.)

Κτερίσματα.—This word is connected with κτῶμαι, and denotes the possessions of the dead, which have been given to him for his life in the tomb. These possessions may be either those given to the dead at the time of burial, or those offered later at periodical celebrations or in exceptional circumstances to appease the dead. The former were buried or burned with the body, while for the latter the best example is the offering in the *Electra* of Sophocles. The word then denotes exactly what the French archaeologists call *mobilier funéraire*. The Greek word is only used in the plural. (R. SCHWAB, *R. Ét. Anc.* VI, 1904, pp. 99–102.)

Greek Ritual of Sacrifice.—In *Jb. Arch.* I. XVIII, 1903, pp. 113–123 (6 cuts), P. STENGEL discusses von Fritze's interpretation of καταστρέφειν and αἵρεσθαι (see *Am. J. Arch.* VIII, 1904, p. 314), pointing out that these words, with the synonyms of the latter, refer only to the position of the heads of the victims offered respectively to chthonian and celestial divinities, and that the position of the animal itself, whether touching the ground or not, was largely a matter of size and convenience. The older custom of suspending a bull from a tree or post, as pictured on coins of Ilium, was an isolated survival at that place.

The "Thracian Horseman."—An attempt to interpret some features of the various monuments relating to the worship of the "Thracian Horse-

man" is made by J. ZIEHEN, in *Arch. Anz.* 1904, pp. 11-17 (2 cuts), on the basis of a recent Hungarian publication of Professor J. Hampel, of Pest. The monuments, of which Hampel gives 67, are small lead tablets of good workmanship, rude painted stone carvings small enough to have been worn as amulets, votive reliefs of various sizes, only one of which has an inscription, and four engraved gems, used perhaps as signets or as means of recognition between the votaries of this secret religion. Most of them come from the Danube and Balkan regions. The features common to all are the horseman or a pair of horsemen, a creature under the horse's feet, sometimes a human figure, sometimes a fish, and a female figure which has some likeness to Sigé and to Nemesis. The representations, which often contain a large number of figures and which are in some degree influenced by the worship of the Dioscuri and other neighboring religions, include sacrificial banquets, the sacrifice and stages of preparation for it, scenes which represent the god as a hunter, etc. Some of the subordinate figures probably represent initiates of various grades.

Phayllus and his record Jump.—That τὸ σκάμμα and τὰ ἔσκαμμένα both alike mean the soft ground dug up for a jumper to land on, and ὁ βατήρ, the hard ground from which he "takes off," that there is no valid evidence for supposing the Greek long jump to have been a triple jump or a hop, skip, and jump, and finally that the inexplicable "record" of fifty-five feet claimed for Phayllus is a gross exaggeration resting solely on an epigram made centuries after the real Phayllus lived, and under the influence of popular traditions of a famous athlete and the conventional use of the number five, are the conclusion reached by E. N. GARDINER, after a thorough study of the authorities, and set forth in *J.H.S.* XXIV, 1904, pp. 70-80.

An Index to the Ἑφημερίς Ἀρχαιολογική.—The first volume, including the years 1883-1887, of an elaborate Index to Ἑφ. Ἀρχ. has been prepared by A. LAMPROPOULOS. It contains lists of contributors (coll. 1-8), plates and figures (coll. 9-11), and subjects (coll. 13-116), but by far the larger part of the work is devoted to a very elaborate and carefully classified index to all the Greek inscriptions (coll. 117-542), including names of Persons and Places, Political Antiquities, Religion and Religious Celebrations, Vocabulary, Grammar, Numerals, References to Classical Authors, Citations of Other Inscriptions, and a table showing the republication of inscriptions from the Ἑφημερίς. Shorter indices (coll. 543-550) cover Egyptian and Latin inscriptions. (Εὐρετήριον τῆς Ἀρχαιολογικῆς Ἑφημερίδος τῆς τρίτης περιόδου, ὑπὸ Ἀλεξάνδρου Λαμπροπούλου. Athens, 1902, G. S. Vlastos. 225 pp.; 4to.)

Notes on Recent Archaeological Publications.—In his *Bulletin Archéologique* (*R. Ét. Gr.* XVII, 1904, pp. 77-110; 28 figs.) A. DE RIDDER summarizes fifty-three publications treating of Greek Architecture and Excavations, Sculpture, Frescoes and Vases, Bronzes and Terra-cottas, and miscellaneous objects. Five articles have not yet been reported in this Journal. In *Mémoires de l'Académie royale de Danemark*, 6^e sér. (Lettres) V, 1902, pp. 299-301, Ussing interprets the folded cloth on the east frieze of the Parthenon as a carpet to be spread under the feet of the gods. In the *Revue de philologie*, 1902, pp. 213-215, Foucart argues that the base in Rome bearing the name of Pythocles of Elis and the signature of Polyclitus was prepared to hold the original statue, which was replaced at Olympia by a

copy set on the original base. In *B. Com. Roma*. 1902, pp. 3-12, Mariani publishes the bust of a Greek general, of which two other copies are known. He considers it a portrait of Iphierates, and it certainly seems to belong to the early fourth century. Lucas maintains that the "Niobid" of Subiaco is a Ganymede. The Ilioneus of Munich and perhaps the Daphnis of Berlin belong to the same school. (*Jb. Alt. Ges. L. P.* IX, 1902, pp. 427-435.) De Ridder doubts the identification and refers to Ussing, *l.c.* pp. 304-306, who calls it a ball-player. A little bronze centaur, found at Citta di Castello, has human feet, and the back part of the body wrapped in an himation. (*Not. Scavi*, 1902, pp. 481-482.)

ITALY

ARCHITECTURE

Ara Pacis Augusti.—Further restoration and interpretation of this monument have been made possible by discoveries since the publication of E. Petersen's monograph, Vienna, 1902, and are explained by the same writer in *Arch. Anz.* 1903, pp. 182-185 (plan).

A Lost Relief.—In January, 1572, Prospero Visconti sent to Duke William of Bavaria a relief representing Bacchus, which arrived at Landshut in November, 1573, and since then has disappeared. In *Sitzb. Mün. Akad.* 1902, pp. 521-534 (pl.), H. SIMONSFELD identifies this relief with one in S. Ambrogio in Milan from the eleventh to the sixteenth century, described by contemporary writers as a Hercules. A drawing in the unprinted 'Antiquario' of Aleiati shows it was an inscribed (*C.I.L.* V, 6014) Roman gravestone on which was represented a youthful satyr wearing the nebris, and holding in his left hand a small lion by the tail, while his right hand swung a lagobolon. The descriptions indicate that it was of great size.

VASES AND PAINTING

Mycenaean Vases at Torcello.—In the museum at Torcello are four late Mycenaean vases, of simple form and decoration, resembling those found in Sicily and Cephallenia, at Tarentum, and at Ialysus in Rhodes. It seems to be a fact that none of the earlier and finer ware has been found outside of the Aegean islands, showing that the wide diffusion came only when the art was in a dead or dying stage. Considering the position of the other points, —and even Spain may be added to the list,—it seems most probable that Torcello, the farthest north, was reached by sea, although a land-route of trade to the Aegean, through Thessaly and Euboea, is known to have existed. Mycenaean remains in Italy occur in connection with the latest bronze age. A large Corinthian black-figured vase also at Torcello is of interest, as the style, though found north of the Alps, has been supposed not to exist in the valley of the Po. (R. M. DAWKINS, *J.H.S.* XXIV, 1904, pp. 125-128; 2 cuts.)

Roman Paintings in Frankish Times.—At the January (1904) meeting of the Berlin Archaeological Society, a small Roman wall-painting which has been discovered in the remains of a Merovingian palace just below the street-level in Kirchheim, Elsass, was shown in copy and discussed by WINNEFELD. In composition and execution it recalls the catacomb-paintings of the second and third centuries. That parts of earlier palaces were

incorporated into Frankish structures, and that the men even of Carolingian times had the actual work of Roman artists before their eyes to influence their own development, is here made evident. (*Arch. Anz.* 1994, p. 65.)

INSCRIPTIONS

Imperial Titles.—In *M. Soc. Ant. Fr.* LXI, 1900 (published 1902), pp. 52–78, C. PALLU DE LESSERT discusses the occurrence under the early empire of a group of titles consisting of a substantive denoting quality joined with a possessive adjective of the first or second person and a verb of the third. Such titles are *maiestas tua*, *providentia tua*, etc. He considers in some detail the use of *maiestas* and *aeternitas*, as well as *dominus* and its Greek equivalent *κύριος*. Such titles seem to have been developed in popular usage and only at a late period to have been adopted in official documents.

Inscriptions relating to Roman Antiquities.—R. CAGNAT and M. BESNIER continue their review of epigraphical publications relating to Roman antiquities in *R. Arch.* II, 1903, pp. 435–492; III, 1904, pp. 293–304. The first article contains the text of 174 inscriptions, of which 45 are Greek, as well as brief mention of epigraphical publications, and an elaborate series of indices to the review for 1903. In the second article are published 54 inscriptions, including one in Greek on a tessera, and the usual bibliographical notes, covering the period from January to April, 1904.

COINS

A Medallion of Constantine II.—In *B. Ant. Soc. Fr.* 1903, pp. 340–343 (fig.), J. MAURICE discusses a bronze of Constantine II Caesar, representing the triumph of the Caesars, sons of Constantine the Great. Its size leads to the conclusion that it is a bronze model for a gold medallion or silver coin. It resembles closely a medallion of Constans I Caesar. Such pieces seem to have been struck in connection with the celebration of some glorious anniversary later than the victories over the Goths and Sarmatians in 332 A.D., but not to mark any special triumph.

The Portrait of Maxentius.—In *B. Soc. Ant. Fr.* 1902, pp. 339–341 (pl.), J. MAURICE discusses the portraits of Maxentius as shown on a series of coins struck at Rome, Ostia, Aquileia, and Carthage between 306 and 312 A.D. All show the same characteristic features, and it is clear that all the artists were working from the same model, apparently a portrait sent to each mint on his accession. This seems to have been the rule during the age of Constantine, and the coins may be taken as furnishing true portraits of the emperors of that period.

The Imperial Cult in the Fourth Century.—A series of bronze coins of the late third and early fourth centuries shows an altar and Genius, designated by the inscription as the Genius of Augustus, or of the emperor, or of the Roman people. In *B. Soc. Ant. Fr.* 1903, pp. 211–220, J. MAURICE argues that these coins prove the provincial cult of the emperor in the cities and periods when they were issued. They come from Lyons, Aquileia, Antioch, Cyzicus, and Nicomedia, in all of which this cult is known. The other mints, where this type is not struck, are all in cities where there was no *concilium provinciae*, or where the cult assumed a different form.

The Mint at Ticinum.—In *Bollettino di Numismatica*, II, 1904, pp. 2–8 (2 figs.), P. MONTI and L. LAFFRANCHI defend their view that certain impe-

rial coins marked T are from a mint at Ticinum and not from Tarragona, as has recently been argued. The article contains a comparative table of issues of Ticinum and Aquileia in 307-309 A.D. *Id. ibid.* pp. 25-27, conclude a list of the coins from this mint, publishing the issues of 312-325 A.D.

Notes on Roman Coins.—In the *American Journal of Numismatics*, XXXVIII, 1904, pp. 65-69 (pl.), G. N. OLCOTT publishes two recent discoveries, an *aureus* of Augustus (c. 20 B.C.) and a bronze "medallion" of Antoninus Pius (139 A.D.). He also adds brief descriptions of ten coins not mentioned by Cohen. Six were issued under Nero after his monetary reform, and one each under Tiberius, Claudius, Galba, and Otho. All are bronze except the last, a denarius, of which the type was only known in gold (Cohen, 22).

GENERAL AND MISCELLANEOUS

The Topography and Monuments of Ancient Rome.—Professor PLATNER has written a handbook "to serve as an introduction to the study of the topography of ancient Rome for students of Roman antiquities and history, and incidentally as a book of reference for those who have any special interest in the monuments which still remain." In such a work little discussion of doubtful points is possible, but the numerous references to ancient and modern sources of information will aid the serious student to investigate and reach his own conclusions. Seven chapters treat respectively of the 'Sources of Information'; 'General Topography of Rome and the Campagna'; 'Building Materials and Methods'; 'History of the Development of the City'; 'The Tiber and its Bridges'; 'Aqueducts and Sewers'; and 'Walls, Gates, and Bridges.' The remaining thirteen chapters describe the various parts of the city and the monuments contained in each. Modern discussions and discoveries published as late as 1903 are referred to in the text or notes, and the plans also, while derived from other works, are changed, when necessary, to include the results of recent investigation. Many of the figures are full-page illustrations. The book contains an index. (SAMUEL BALL PLATNER, *The Topography and Monuments of Ancient Rome*, Boston, 1904, Allyn and Bacon. College Latin Series. xiv, 514 pp.; 98 illustrations, including 9 maps and plans; 8vo.)

The Excavations in the Forum.—*Jb. Alt. Ges. L. P.* VII, 1904, pp. 23-45 (20 figs.), contains a summary description by C. HÜLSEN of the recent excavations in the Forum, with special reference to the more important results for the early and late history of the Forum. The topics treated include the old necropolis, the *lapis niger* and *cippus*, the Curia of Diocletian, the Basilica Aemilia, the subterranean passages beneath the imperial Forum, the *templum divi Augusti*, and the church of S. Maria Antiqua with its frescoes.

A convenient handbook of the Forum in the light of recent discoveries has been prepared by C. HÜLSEN. The first part (pp. 1-47) contains a summary history of the Forum, treating of the development of the region in antiquity, its condition during the Middle Ages, until the time of Cola di Rienzo, and finally of the successive excavations since the fifteenth century. The second part (pp. 48-174) is a brief but clear description of the monuments, beginning with the Basilica Julia, and following a strictly topographical order to the Temple of Jupiter Stator. A brief bibliographical appendix (pp. 204-211) gives for each monument the most important

references to the ancient authorities and recent discussions. (*Das Forum Romanum: seine Geschichte und seine Denkmäler*, von CHR. HÜLSEN. Rome, 1904, Loescher & Co.; pp. viii, 220; 3 plans; 109 figs.; small 8vo; Mk. 4.)

Much briefer is the summary account contained in a volume by ST. CLAIR BADDELEY, who has closely watched the progress of the excavations since 1898. His description is based rather on the order in which Boni's discoveries have progressed, than on topographical relations, though these latter are not wholly neglected. The plan of the work, which is called "a handbook for travellers," precludes any extended citation of ancient authorities or modern literature. (*Recent Discoveries in the Forum* by ST. CLAIR BADDELEY. New York, 1904, The Macmillan Co.; London, George Allen. pp. xii, 116; plan; 45 figs.; 16mo; \$1.25.)

The Neighborhood of the Comitium.—An important study of the monuments in the neighborhood of the "Grave of Romulus" has been published by E. PETERSEN. He argues that the Cippus and Column, together with the scanty remains of a *suggestus* close by, belong to the "regal period," and that the two former are in the prolongation of the axis of the Curia Hostilia. The "Tomb" with the lions, and the so-called Altar are republican. The former, having been profaned during the Gallic invasion, was buried in sacrificial remains, while the latter is really the Rostra of 338 B.C. The difference in orientation of these structures from the earlier seems to correspond to a difference in the position of the Curia even before the erection of the Curia Sullana, which seems to have extended under S. Adriano and S. Martina. The erection of the Curia Julia (S. Adriano) was accompanied by other changes in the Comitium, and in particular the pavement was continued over the Tomb, whose site was marked by the black marble slabs, which, however, were oriented with reference to the Curia, and only partially covered the tomb. (*Comitium, Rostra, Grab des Romulus*, von EUGEN PETERSEN. Rome, 1904, Loescher & Co.; pp. 42; plan; 8vo; Mk. 1.60.)

The Forum of Archemorus.—In *B. Soc. Ant. Fr.* 1903, pp. 286-288 (fig.), C. RAVAISSON-MOLLIEN gives some reasons for believing that a Forum Archemonium or Archemonium may have existed in Rome. He publishes a view of this *Foro Archimonio* from Niccola Roisecco's *Nuova Descrizione di Roma*, II, p. 278 (1765).

The Submerged Shore near Naples.—It is well known that geological evidence shows that the Roman shore at Naples was 16 feet higher than the present line, but that it had fallen nearly 40 feet by the end of the twelfth century, though in the sixteenth it had again begun to rise. In *Archaeologia*, LVIII, 1903, pp. 499-560 (7 pls.; 29 figs.), R. T. GUNTHER publishes a very full account of his study of ancient remains along the coast, and particularly in the submerged region. The southern end of Posilipo, from the Villa Rosebery to the Gaiola Islands, proved most remunerative and is described in great detail, though the examination extended from Naples to Misenum. The conclusion is reached that along a large part of this coast ran a road, on either side of which were villas, while landings were protected by breakwaters.

Nemus Aricinum.—The sanctuary and worship of Diana at Aricia, with the recent literature of the subject, are discussed by LUCIA MORPURGO, in *Mon. Antichi*, XIII, 1903, coll. 297-368 (3 pls.; 26 cuts). At the site of

the temple, on the northeastern shore of Lago di Nemi, are extensive remains of the surrounding retaining walls, but architectural and other remains are fragmentary and much scattered. Although some objects of a very primitive stage of civilization appear among the *ex votos*, the sanctuary is probably not earlier than the fourth century B.C., and was instituted as a centre for a Latin league, supplanting an earlier one on Mount Algidus. From it was derived the worship of the Aventine Diana, with the same festival, the Ides of August. The native Latin goddess of nature has here both original and acquired characteristics in common with the Greek Artemis, and with the spot are associated also the nymph Egeria (Sender-forth of waters), the inferior god Virbius, half nature, half solar divinity, and the strange *rex nemorensis*, a man who lived a wild life in the woods and was succeeded only by one who slew him, so typifying the ever-transmitted life of nature. The most flourishing period of the sanctuary was 100 B.C.—200 A.D.

Studies in Italian Topography.—In *Jh. Oesterr. Arch. I.* VII, 1904, pp. 42-70 (fig.), O. CUNTZ continues his study of Italian topography according to the itineraries (see *Am. J. Arch.* III, 1899, p. 366). Leuceris, between Bergamo and Brescia, is identified with the mediaeval Leoces, the modern Trescore at the end of Valle di Lesse. The roads from Luna over the Apennines are discussed. The Ravennas has combined the names on two roads, whose course is traced. The routes between Cosa and Populonia seem to show that the ancient coast line in the neighborhood of Grosseto was about midway between the lines given by Kiepert and Sieglin. The road from Cagli to Senigallia passed through the valley of the Cesano, where, near the church of S. Gervasio, was *ad Pirum Filumeni*, perhaps a corruption for *ad Pilum Pilumni*. The Sabine Pitinum on the road from Foruli to Aveia is probably Coppito, and Prifernum Aquila.

Monuments of the Peligni.—Some monuments in the little museums at Sulmona (Sulmo) and Pentima (Corfinium), as well as the excavations at the latter place, are described by M. BESNIER in *M. Soc. Ant. Fr.* LXI, 1900 (published 1901), pp. 243-258 (pl.). The greater part of the article describes the relief, *C.I.L.* IX, 3128, and an oval marble *clipeus* similar to those at Naples, containing on one side the head of a faun in relief, and on the other a browsing hare.

The Etruscan Chariot in the Metropolitan Museum, New York.—This chariot (see *Am. J. Arch.* VIII, 1904, p. 126) is briefly described by J. OFFORD in *R. Arch.* III, 1904, pp. 305-307 (3 pls.). He calls special attention to the nine spokes in each wheel. This seems to be the number in the chariot of Apollo and Artemis in the Phigalian frieze, but elsewhere an even number seems usual.

An Ancient Door-latch.—A door-handle which slid up and down against the door-plate by means of bolts passing through slots, and so probably moved a double latch, is among the articles from Boscoreale in the Antiquarium at Berlin. It seems to be a Greek rather than a Hellenistic or Roman invention. (E. PERNICE, *Jb. Arch. I.* XIX, 1904, pp. 15-21; 5 cuts.)

Paegniarii.—In *R. Arch.* III, 1904, pp. 308-316 (5 figs.), J. DÉCHELETTE discusses some representations of the *paegniarii*, or gladiators who amused the spectators by burlesque combats. They are usually represented

with a small oval shield, and a *pedum*, though they sometimes carry a whip or a small club. Such a combat is shown on the mosaic from Tusculum in the Museo Kircheriano (*Ann. d. Ist.* 1876, p. 66), where the participants are costumed to represent a Bacchant and Faun defeating Indians.

Tools of Roman Workmen. — Numerous representations of the tools used by Roman workmen are known on tombstones, but the actual tools preserved in museums have not been discussed. A contribution to this subject is made by A. HÉRON DE VILLEFOSSE in *M. Soc. Ant. Fr.* LXII, 1901 (published 1903), pp. 205-240 (6 figs.). He publishes a stone-cutter's tool from Syria recently acquired by the Louvre. It is ingeniously constructed so that it can be used as ruler, square, level, to mark angles of various kinds, or with a plumb line. The rest of the article is given to a description of three Roman foot-rules in the Louvre, and a list of nine similar rules found in Gaul. It appears that they are regularly provided with a hinge, and divided on the upper face into sixteen *digiti*, on the lower face into four *palmi*, and on one side into twelve *unciae*. The fourth face is plain.

Vitruvius. — In *R. Arch.* III, 1904, pp. 222-233, 382-393, V. MORTET continues his critical studies on Vitruvius and his work. (See *Am. J. Arch.* VII, 1903, p. 249.) These articles collect the literary and epigraphical evidence. Neither Pliny nor Fronto, in referring to a Vitruvius, certainly indicate our author. The reference in Servius is at best very doubtful. Cetus Faventinus gives us his cognomen, Pollio, and Sidonius Apollinaris testifies to his reputation in the fifth century in Italy and Gaul. Inscriptions containing the name are cited from Italy and Africa, and the general conformity of the Roman buildings in Africa to the rules of Vitruvius is noted.

Dates of the Salutations of Nero. — In *R. Arch.* III, 1904, pp. 263-272, H. STUART JONES disputes the conclusions reached by E. Maynial (see *Am. J. Arch.* VII, 1902, p. 217) as to the dates of the *salutationes imperatoriae* of Nero. The first three dates are accepted. Then follow: IV. Summer of 58 A.D. (success of Corbulo in Parthia). V. Later summer of 58 A.D. (victory of Duvidus Avitus). VI. Still later in 58 A.D. (capture of Artaxata by Corbulo). VII. Summer of 59 A.D. (capture of Tigranocerta). VIII. During 60 A.D. (victory of Suetonius Paulinus in Britain). IX. During 62 A.D. (probably the arrival of pompous despatches from Paetus in Armenia). X. Between 64 and 66 A.D. (probably on the discovery of Piso's conspiracy). The last two are as given by Maynial.

FRANCE

The Earliest Gallic Religion. — In *R. Ét. Anc.* VI, 1904, pp. 47-62, 131-144, 256-262, C. JULIAN continues his notes on the earliest Gallic religion. (See *Am. J. Arch.* VIII, 1904, p. 324.) The first article discusses the ritual connected with war, which is best known, and where old forms are best preserved. The second treats of Gallic cosmogony, theogony, and anthropogony, including the abode and duration of the gods, the creation and education of men, divine vengeance, and the state of the dead. The last article collects the references to priests and priestesses, apart from the Druids and prophets mentioned by Caesar.

The Samnagenses. — The *Samnagenses* are mentioned by Pliny as living in southern Gaul near the Rhone, and their name appears in Greek on coins,

and in two Latin inscriptions. The exact situation of their town has, however, been much disputed. A new discussion of the subject by J. BERTHELÉ appears in *M. Soc. Ant. Fr.* LXII, 1901 (published 1903), pp. 241-292. After a summary of the evidence and of previous views, he argues at length on philological and archaeological grounds for the suggestion of François Germer-Durand that the *oppidum* of the Samnagenses was Nages (Gard), the mediaeval Anagia.

A Greek Stele at Narbonne.—In *B. Soc. Ant. Fr.* 1902, pp. 347-348 (pl.), HÉRON DE VILLEFOSSE publishes a photograph of a Greek grave-relief of Pentelic marble, belonging to the fourth century B.C. The publication is of value as replacing an inferior drawing in *Attische Grabreliefs*, No. 944.

The Tiara of Saitaphernes.—In *R. Ét. Gr.* XVII, 1904 (pp. 111-120), T. R(EINACH) republishes, with a short introduction, an article contributed by him to *Figaro*, May 31, 1903, in which he states the main facts regarding the Tiara of Saitaphernes, as revealed through the investigation by Clermont-Ganneau. While much is false, several of the designs impeached by Furtwängler and others are genuine according to the evidence of Roukhomovsky.

GERMANY AND AUSTRIA

The Situation of Prehistoric Settlements.—In *Mitth. Anth. Ges.* XXXIII, 1903, pp. 301-320 (14 figs.), A. SCHLIZ examines the character of the successive settlements along the middle Neckar from neolithic times, with a view to showing that in successive periods this character differs so sharply as to imply a change of race. The differences are found in the selection of sites, the form and arrangement of the settlements, and the structure of the single houses. The author examines in some detail the neolithic, bronze, and Hallstatt periods, the changes produced by the Gallic invasion in the Latène period, and briefly the conditions during the successive occupations of Marcomanni, who have left but few traces, Romans, and Franks, who gave the settlements their present characteristic form, and curiously returned in many cases to the old sites of the stone age.

The Roman Amphitheatre at Metz.—*B. Soc. Ant. Fr.* 1903, pp. 256-261, contains a description by GRENIER of the recent discovery of the large Roman amphitheatre at Metz. (See *Am. J. Arch.* VIII, 1904, p. 118.) It was elliptical, with a major axis of 150 m., and a minor axis of 126 m. The arena measured 68 m. by 41.50 m. Between the arena and outer wall were found five large walls and seventy-two cross-walls. The whole structure must have accommodated from fifteen thousand to twenty thousand spectators. Used as a quarry during the Middle Ages, and later covered by the fortifications, the site has yielded little of value. There are many indications that it was used as a Christian burial place after the time of Constantine.

Color on the Neumagen Sculptures.—A. GRENIER has studied carefully the use of color on the monumental sculptures from Neumagen in the museum at Trèves. Whether hard limestone or porous sandstone was used, the whole design was colored on a coat of whitewash. The ground was Egyptian blue, and on this details of interiors or trees and rocks were painted. According to established conventions a light yellow was used for faces and nude parts, the bodies of animals, all women's garments, and the

togas of men in Roman costume. A reddish brown was used for hair and beard, horses' manes, and the garments of men in Roman costume. A bright red was reserved for furniture, weapons, and the ornamentation of clothing, armor, etc. Metal in vases, coins, and some other objects was represented by bright yellow, while green was sometimes used for foliage. Contours and details are often brought out by brown lines, even where the sculptor had also indicated them. This extensive use of color gave the reliefs essentially the appearance of a painting. As the sculpture differs little from that of contemporary works in Rome and Italy, it is probable that these also were painted in like manner. (*R. Arch.* III, 1904, pp. 245-262.)

Bells in the Thiasos.—In Regensburg is a curious Roman monument, which has on the front the representation of a suicide, perhaps the death of Ajax, doubtless chosen with reference to the manner of death of the person to whom the monument was erected. On one of the small sides is represented a youthful satyr, holding in his left hand a short stick, resembling a *pedum*, while his right is stretched down toward a perforated disk, which he seems to raise with his right foot. The key to the interpretation is furnished by a stone at Metz, where is seen a dancing Maenad, holding such a disk by a strap in one hand, while the other holds a curved stick. The disk is a bell such as hangs at the doors of Pompeian houses, and was used as a signal in the baths, but has not hitherto been noted as one of the accompaniments of the Bacchic dance. (*J. JÜTHNER, Jh. Oesterr. Arch. I. VII, 1904, pp. 146-150; 5 figs.*)

The Coinage of Trèves.—The issues of the Roman mint at Trèves during the Constantinian period (305-337 A.D.) are carefully described and classified chronologically by J. MAURICE in *M. Soc. Ant. Fr.* LXI, 1900 (published 1902), pp. 127-190 (2 pls.), and LXII, 1901 (published 1903), pp. 25-114 (2 pls.). The first article describes five series extending from May 1, 305, to the beginning of 320; the second catalogues six more from 320 to September 9, 337.

The Wars of Domitian on the Rhine and Danube.—An inscription, recently found at Baalbek, contains the military record of C. Velius Rufus who from *primus pilus* finally became procurator of Raetia. First published by Mommsen in *Sitzb. Berl. Akad.* 1903, p. 817, it is reprinted with a detailed commentary by E. RITTERLING in *Jh. Oesterr. Arch. I. VII, 1904, Beiblatt, coll. 23-38*. It is especially valuable for its references to Domitian's wars in Germany (83 A.D.) and on the Danube. It is argued that there was but one Dacian war, which ended with the peace of 89 A.D. This was followed by the Sarmatian war, which does not seem to have lasted later than 93 A.D. In this war Rufus led a division through Dacia against the enemy. An appendix contains the assignment of legions along the Danube during the reign of Domitian.

The Dacian Wars of Domitian.—The position on the left bank of the Danube of Drobeta, which was made a *municipium* under the Flavian emperors (*C.I.L.* III, 1581 = 8017), makes it probable that it guarded the bridge by which Cornelius Fuscus crossed the Danube, and not unlikely that it was the city in which Domitian remained while his generals carried on the Dacian wars. (*C. PATSCH, Jh. Oesterr. Arch. I. VII, 1904, pp. 70-72.*)

GREAT BRITAIN

Roman Hayling.—Under this title TALFOURD ELY has published a dissertation accepted by the University of London for the degree of D. Lit. In it he describes the results of his excavations on Hayling Island from 1897 to 1903. The actual work was all done by the author, who in a series of trenches at the Towncil Field uncovered part of the foundations of a large parallelogram, having near the centre a circular building 37½ feet in diameter. In the southeast corner of the enclosure and outside were remains of other walls, and the flint pavements of rooms. No inscriptions were found, and but little of value except a bronze brooch inlaid with blue enamel. From the coins and other evidence it is probable that the Roman settlement was made about 45 A.D. (*Roman Hayling: A Contribution to the History of Roman Britain*, by TALFOURD ELY. London, 1904, Taylor and Francis; pp. x, 33; Plan; 5 pl; 8vo.)

An Inscription from Carnarvonshire.—*Proc. Soc. Ant.* XIX, 1903, pp. 255-262 (fig.), contains a paper by J. RHYS discussing an inscription found near Bryn kir station in Carnarvonshire. The lines are unequal in length, but the right edge of the stone seems intact. It runs |CORIFILIVI| POTENTI|NI. This is read as *ic Ori filiu(s) f(ili) Potentini*. The latter name is a translation from the Goidelic. The whole means "Here is the burial place of Ore; he was son of Mac Ceithernaigh." See also C. JULLIAN in *R. Arch.* III, 1904, pp. 413-414.

AFRICA

Cybele and Attis in Africa.—The cult of Cybele and Attis, the *Dii omnipotentes*, in Roman Africa is the subject of an article by H. GRAILLLOT in *R. Arch.* III, 1904, pp. 322-353. Starting from the long inscription of Sitifis, *C.I.L.* VIII, 8457, of 288 A.D., he first examines the use of the epithet *omnipotentes*, which appears only near the end of the third century, and earlier in Africa than in Rome. It is a Semitic idea, and its appearance in Africa would be aided by the character of the Carthaginian cults of Tanit and Baal, who survived in Roman times as *Virgo coelestis* and Saturn, and are found worshipped in close connection with the Phrygian pair. This gives the cult of the *Magna Mater* in Africa several special characteristics. (1) Cybele and Attis are called *Sancti* and *Sanctissimi*. (2) Their temple is *religioussimum*. Both are Semitic formulae. (3) The religious associations for this worship are especially developed. (4) Taurobolia and criobolia are especially frequent. (5, 6, 7) With this cult are associated Ianus Pater, Castor and Pollux, and Liber Pater.

Pre-Roman Antiquities of Hippo.—In *B. Acad. d' Hippone*, XXX, 1901, pp. 1-6 (2 pls.), S. GSELL discusses several pre-Roman antiquities in the museum at Bône. Among these are a bronze disk, with a lion's head in relief, certainly of Phoenician origin, and three faïence Ushabtis, probably Egyptian originals of the seventh or sixth century B.C.

Two Médaillons from Tebessa.—In *B. Acad. d' Hippone*, XXX, 1901, pp. 7-16 (pl.), A. PAPIER discusses two terra-cotta medallions from Tebessa. One he interprets as the city of Tebessa, pouring a libation, rejecting a suggestion of Mélis that it represented Ἀγαθὸς Δαίμων. For the other plaque

he adopts the view of Mélix that it represents Heracles in his madness attacking Amphitryon.

Thugga and Thignica in the Seventeenth Century.—In October, 1631, Thomas d'Arcos, a Provençal, captive of the corsairs, and later a Mohammedan convert, sent to Peirese some notes of a visit to Thugga and Thignica. This narrative, with an account of the author and his other writings and a brief commentary, is published by L. POINSSOT in *M. Soc. Ant. Fr.* LXII, 1901 (published 1903), pp. 144–184. At Thignica he describes a temple, probably that of Mercury, a semicircular structure near by, and the castle. At Thugga his attention was attracted by the theatre, the capitol, the temples of the Pietas Augusti, and of Caelestis, the triumphal arches, and the Punic mausoleum.

The Proconsul Euxenius.—In *B. Soc. Ant. Fr.* 1903, pp. 326–328, PALLU DE LESSERT publishes an inscription from Guelma (Calema) mentioning a proconsul of Africa, Flavius Eucsinus. The date cannot be far from 383 A.D. At that time there was in Africa a proconsul Eusignius, a correspondent of Symmachus and mentioned in the Theodosian Code. The author is inclined to identify the two men, and prefer the form Euxenius, but quotes a letter of O. Seeck to the effect that the best manuscripts of Symmachus and of the Code show no variation in the spelling of the name and suggesting that the error is in the inscription.

The Vetidii of Khamissa.—In *Mélanges de l'École française de Rome*, 1903, pp. 117 ff., A. MERLIN published six epitaphs of Khamissa (Thubursicum Numidarum) relating to a family of Vetidii. In *B. Soc. Ant. Fr.* 1903, pp. 333–340, he publishes a new inscription relating to the most prominent member of the family, Q. Vetidius Iuvenalis, who was decurion, flamen, aedile, and triumvir. This document makes possible a corrected genealogical tree. According to Schulten, the family were probably Italian colonists, who owed their wealth and position to farming.

The Aquae Persianae.—The identification of the *Aquae Persianae* mentioned by Apuleius (*Flor.* 16) with the baths at Hammam-Lif is maintained by P. MONCEAUX in *B. Soc. Ant. Fr.* 1903, pp. 331–333. An inscription (*C.I.L.* VIII, 997) mentions T. Iulius Perseus, who is probably the friend of Apuleius (*Flor.* 18), and the person for whom the baths were named. These baths are the station *Ad Aquas* of the Peutinger Table, and formed a suburb of *Narvo*.

EARLY CHRISTIAN, BYZANTINE, AND MEDIAEVAL ART GENERAL AND MISCELLANEOUS

The Origin of the Labarum.—In *B. Soc. Ant. Fr.* 1903, pp. 310–317, J. MAURICE discusses the origin of the Christian monograms on the coins of Constantine, and of the *labarum*. The monograms are ✠, i.e. Ἰησοῦς Χριστός, and ☩, i.e. Χριστός. Both are very rare in inscriptions earlier than the middle of the reign of Constantine, and the latter is the one which appears on the staff of the *labarum*, above the square of purple bearing the medallion of Constantine and his two sons. Lactantius describes a third form, still found on coins, in which the top of the I is curved, but not so far as to form the P, and says this was borne on the shields of Constantine's army at the Milvian bridge. It is argued that the *labarum* was not invented

for that battle, but first appeared as the standard of the Western Empire in 317 A.D. at the elevation of the Caesars, and was only placed on the coinage after the fall of Licinius in 324 A.D.

The Sacrifice of Isaac on an Oriental Lamp.—In the *Röm. Quart.* 1904, pp. 21–34, A. DE WAAL describes a Christian lamp in the museum of the Campo Santo Tedesco at Rome, coming from Jerusalem or its neighborhood. The lamp is decorated with a representation of the Sacrifice of Isaac. The unusual features in the scene are a cypress-tree (?), an altar equipped with *cornua*, and a kind of column which De Waal, on the authority of Baumstark, identifies with the *βαρύλιον*, the stone-fetish of Semitic nature-worship. The numerous citations made by De Waal furnish a good catalogue of monuments containing representations of the Sacrifice of Isaac.

The Evolution of the Mitre.—A brief outline of the development of the episcopal mitre from the simple band or narrow plate of metal used in the early church to the lofty and highly ornamented form which has prevailed from the end of the fourteenth century is given by H. P. FEASEY in *Reliq.* X, 1904, pp. 73–82 (37 figs.). Analogies in the headdresses of priests and divinities in the cults of Egypt and Babylonia are also indicated.

A Byzantine Bishop “in partibus.”—G. SCHLUMBERGER communicates in *B. Soc. Ant. Fr.* 1903, pp. 171–172, a Byzantine seal from his collection bearing on one side an effigy of St. Nicholas, on the other the legend: $\overline{\text{W}}(\alpha\nu\eta\varsigma) \text{ ΕΠΙΣΚΟΠΟΣ ΤΗΣ ΑΦΡΙΚΗΣ}$. As the seal cannot be earlier than the tenth century, or thereabouts, at which time there were no more Byzantine bishops in Africa, Schlumberger suggests that it belonged to a bishop “in partibus.” P. MONCEAUX, however, *ibid.* pp. 185–187, points out that so extensive a title would be unusual even for a titular bishop, and that bishops “in partibus” are not mentioned before Clement V (1305–1314). He thinks that, unless we regard ΑΦΡΙΚΗΣ as the name of a town, the title must have been held by the last bishop surviving in Africa, who must have been bishop of Carthage. In 1076 there were two bishops only left in Africa.

A Carved Ivory Pyx.—The British Museum has recently acquired the Sneyd carved ivory pyx, bearing a representation of the Healing of the Demoniac. Boxes of this type were made between the fourth and seventh centuries, especially in the East, but these carvings are certainly not as early as the sixth century. In *Archaeologia*, LVIII, 1903, pp. 429–436 (pl.; 4 figs.), O. M. DALTON argues that this pyx was made north of the Alps, probably on the Rhine, in the ninth or tenth century, and is an imitation of early Christian work. This view is sustained by a comparison of the details with Carolingian and early German manuscripts and carvings.

Notes on Spanish Monuments.—The second series of S. FATIGATTI'S *Notas Arqueológicas* contains descriptions of some reliefs in the cloister of the cathedral at León, the Basilica of San Andrés at Armentia, the apse of S. Lorenzo at Segovia, the reredos of the cathedral at Oviedo and that of “La Granjilla” in the Escorial, the choir-stalls of León cathedral, and the cross in the treasury of the cathedral at Pamplona. The third series comprises articles on the monastery of Fresdelval at Burgos, objects in iron-work belonging to Conde Vindo de Valencia de Don Juan, and the large pyxis called “del corpus” in the cathedral at Toledo. (Madrid, 1903, Imprenta de San Francisco de Sales.)

ITALY

The Life Allegory in Byzantine Art, and the Torcello Pulpit. — ANTONIO MUÑOZ, in *L'Arte*, 1904, pp. 130-145, writes of the allegorical representations of Life in Byzantine miniatures and sculpture. In the course of his article he takes up the peculiar relief on the stair of the pulpit in Torcello. It represents a naked youth with winged wheels at his feet, running toward the left, holding in his right hand a knife, in his left a balance. To the left of the youth is another who grasps the runner by the hair. Otto Jahn advanced the theory that the group, which Muñoz puts in the early twelfth century, was inspired by, or a reproduction of, the statue of *καρπός* made by Lysippus, and this explanation has been generally accepted, but it is apparent from an epigram by Theodorus Prodromos, cited by Muñoz, that the Torcello relief is an allegorical representation of Life, not of Opportunity. The poem is inscribed "To a Representation of Life" and describes a figure very like that of Torcello. Moreover, the author was a contemporary of the sculptor of Torcello. It is plain, therefore, that we need not go back to Lysippus to find the source of the inspiration of the group, even if the modelling betrays classical influence.

A Gnostic Cemetery. — Baron KANZLER's description of the new catacomb which he discovered on the Via Latina (*N. Bull. Arch. Crist.* 1903, see *Am. J. Arch.* VIII, 1904, p. 130) was accompanied by some notes by Marucchi suggesting the possibility that the cemetery belonged to an heretical sect. *Id. Ibid.* pp. 301-314 gives reasons for believing that the hypogeum was used by followers of the gnostic Valentinus. The isolation of the cemetery, which has no connection with the historical cemeteries of the Via Latina, arouses suspicion as to its orthodoxy, and the vases interspersed among the scenes and symbols pictured in the arcosolium-fresco discovered there, confirm the suspicion, because, while they were evidently meant for eucharistic chalices, their profusion recalls the fact that the chalice played an important part in the ceremonies of the Valentinian heresy. Again, the banquet scene contains twelve guests, and the number twelve was sacred among the Valentinians. Lastly, a Greek epitaph was found in 1857 near the site of the newly discovered catacomb, which contained phrases alluding to the Valentinian doctrine, according to De Rossi, and as the epitaph was not *in situ*, Marucchi thinks that it might well have come from this cemetery. The only other known remains of the heretical sects in Rome are the syncretistic fresco in a crypt of the catacomb of Praetextatus, and an arcosolium in a cemetery near the Via Ardeatina, containing an inscription which De Rossi interpreted as Sabellian.

"Where Peter Baptized," again. — The articles of Marucchi endeavoring to localize the traditions of Peter's first ministry in Rome at the catacomb of Priscilla on the Via Salaria Nuova have called forth many contributions to the subject, and in *N. Bull. Arch. Crist.* 1903, pp. 321-368, MARUCCHI devotes a long article to the defence of the two sources, impeached by Bonavenia, *ibid.* 1903, pp. 135-146 (see *Am. J. Arch.* VIII, 1904, p. 328). He shows by an analysis that both the inscriptions copied in the Sylloge of Verdun, and the phials of oil from the lamps on the tombs of the martyrs, which are inventoried in the Papyrus-list of Monza, were catalogued on the same principle; namely, that while neither list is an itinerary and the topo-

graphical order of the places visited is not observed, the inscriptions copied in one place were grouped together, and the oil from tombs which formed a group was put in a phial by itself. Then, since the oil from the "*sedes, ubi prius sedit Scs. Petrus*," was put in the phials which contained the oil from the tombs of martyrs buried on the Salaria Nuova, and the two metrical inscriptions, which contain references to St. Peter and to a baptistery where he baptized, are grouped with the inscriptions from the catacomb of Priscilla, the latter must have contained the *sedes* and the baptistery which is to be identified with the one recently discovered in that catacomb.

The Giancarlo Rossi Treasure.—In 1890 a publication appeared in Rome reproducing the objects in what passed for a collection of early Christian liturgical utensils, belonging to Sig. Giancarlo Rossi. For a time these objects were accepted as genuine and thought to be specimens, in some cases, of Christian handiwork of even so early a date as the first century. In 1895, however, Grisar published a brochure maintaining the falsity of the whole collection, and archaeologists in general, after a few polemics, acquiesced in his view. In the *R. Art. Chrét.* 1904, pp. 220–222, appears a translation of an article already published in the *Röm. Quart.*, in which RODOLFO MAJOCCHI protests against Grisar's condemnation of the whole treasure, arguing for the genuineness of one object at least, a silver platter supporting a silver receptacle in the form of a lamb and surrounded by twelve "goblets," fixed to the platter. Grisar asserted that we find no trace of a eucharistic lamb, and attaching the "goblets" to the platter is inconceivable save in a forgery. Majocchi says that the things surrounding the lamb are not goblets but lamps, and quotes from the *Vita SS. Faustini et Jovitae* to show that in the eighth or ninth century (the date of the *Vita*) precisely this sort of a vessel was used to hold the eucharistic bread, described in the *Vita* as "*altare aureum gemmis ornatum, et super altare agnum nive canditiorem et in circuitu eius LAMPADES DUODECIM.*"

The Location of S. Gregorio in Palatio.—Among the uncertain points in the topography of Old Saint Peter's was the location of this church, which was finally identified by Duchesne with the ancient *Secretarium*, situated at the south end of the narthex. DE WAAL in *Röm. Quart.* 1904, pp. 35–38, shows that the church or chapel in question is that shown on Alfarano's plan (1589) south of the basilica, between the rotunda of S. Andrea and the Campo Santo, and connected on the plan with the Women's Hospital. He cites in support of his view an unpublished bull of Eugenius IV and the *Martyrologium Vaticanum*. Some interesting suggestions are added as to the connection of the church with St. Gregory (*in Palatio* refers to the proximity of the *Palatium Neronis*, Nero's circus). With De Waal's article appears a letter from Duchesne, who fully agrees with De Waal in the location which he gives to the church.

Recent Work at Ravenna.—In *Athen.* May 28, 1904, G. GRONAU describes briefly a small exhibition of works of sacred art at Ravenna, in which there were some good works, though nothing of great importance for the student. He also gives an account of the important work of Corrado Ricci on the church of San Vitale, where the apse has been restored to its primitive state. Among other things a large piece of rose alabaster, which covered the altar for twelve centuries, but was walled in at the approach of the French in the eighteenth century, has been recovered, and the altar given its original place.

The Age of S. Maria d'Aurona.—The pillars of quatre-foil section crowned with debased Corinthian capitals, which form the chief part of the remains of the mediaeval church and monastery of S. Maria d'Aurona, preserved in the Museo Archeologico at Milan, are important for the history of Lombard architecture, for on the date of these fragments depends the solution of the problem concerning the early or late rise of the Lombard or Romanesque style in Italy, and incidentally the date of S. Ambrogio in Milan. Since the discovery of the pillars in 1868-69, nearly every writer has assigned them to the eighth century (c. 740), on account of the inscription on one of the capitals: "*Hic requiescit domnus Theodorus archiep.*," etc. This seemed to be the epitaph of Theodorus, bishop of Milan from 725-739, who was buried in the monastery founded by Aurona, whose brother he was supposed to have been. On the basis of this date, those who have written on the subject, notably Beltrami, have considered the pillars as examples of the transition from the basilica to the vaulted Romanesque church. This early date is combated by LAUDEDEO TESTI, who, in an exhaustive article in *L'Arte*, 1904, pp. 27-48, 104-129, endeavors to show that the pillars belong to a church built in 1099, to replace the earlier chapel of the monastery, destroyed by the fire which ravaged Milan in 1075. He points out that the inscription on the capital can only be a reminiscence of the tomb of Theodorus, since the pillar which bears it cannot have belonged to a tomb; that the style of both pillars and capitals is unsuited to the eighth century, but finds many parallels in the eleventh; that the Siren carved on one of the capitals is a motive unknown on capitals before the end of the eleventh century, which is true also of the doves drinking out of a chalice, carved on the same capital; that the letters of the inscription are better ascribed to the eleventh than to the eighth century; and that the artisan's signature, carved on the other capital "*Iulianus me fecit sic pulcrum*," is more allied in tone to the self-laudatory signatures of later artists than to the simplicity of the earlier. In conclusion, since by common consent the style of S. Ambrogio is appreciably more developed than that of the S. Maria d'Aurona fragments, Testi considers that the construction of the former must be assigned at least to the twelfth century, and that proof for the early development of the Lombard style is yet to be found.

Byzantine Influence in Lombard Architecture.—In *Sitzb. Mün. Akad.* 1903, pp. 463-503, is a discussion by F. VON REBER of Byzantine influence in northern Italian architecture from the sixth century down. The author traces the course of architectural development from the time of Honorius, with special reference to the Carolingian and post-Carolingian periods. The origin of the German Romanesque is undoubtedly to be found in the Lombard architecture, but this is strongly influenced by the Byzantine school of Ravenna. The Comacini were of little importance in this development, and their prominence in the Lombard code is due to a desire to protect them from the superiority of Ravenna. The views advanced are intended to rebut those of Rivoira (*Le Origini della Archetettura Lombarda*, I, Rome, 1901).

Greek Manuscripts at Turin.—*R. Ét. Gr.* XVII, 1904, pp. 12-17, contains a translation of an article by K. KRUMBACHER in *Allg. Zeit.*, February 26, 1904, on the Greek manuscripts in the burned library at Turin.

These are well known from catalogues by Pasini (1749) and Zuretti (1896). Of the 401 Greek manuscripts about 95 per cent were Christian and Byzantine, and of the few classical manuscripts none were of special importance. The chief Byzantine manuscripts are noted and briefly described. Two important works, a collection of documents, and one of ancient hymns of the Greek church, have been recently collated and described with minute care, so that their loss is not irreparable.

FRANCE AND BELGIUM

The Cathedral of Cambrai. — The leading article in the *R. Art Chrét.* March, 1904, is entitled 'Monographie de l'ancienne cathédral de Cambrai,' by the Abbé A. PASTOORS. He reviews the history of the cathedral, which was finally destroyed at the beginning of the last century, and describes the exterior and interior, the chapels, the choir and tombs, the treasure, and the tower. The article is illustrated with plans and elevations of the structure.

The Death of St. John on the Cathedral of Rouen. — The tympanum of the northern door of the west façade of the cathedral at Rouen is ornamented with two sculptured scenes, the upper one of which has never been satisfactorily explained. The central figure stands in a sarcophagus-like tomb. He raises his right hand in the attitude of one who teaches, and around him are grouped six figures who appear to be the prey of strong emotion. The sculptured scene ornamenting the lower part of the tympanum is taken from the history of John the Baptist and portrays Herod's feast, with Salome dancing, the decapitation of John, and the offering of his head. The upper group has been explained as representing the Precursor preaching, and other solutions have been offered. The key to the meaning of the group is found in the legends current in the Middle Ages regarding John the Evangelist. The sculptor evidently had in mind some story of St. John's death like that in *De Ortu et Obitu Patrum*, attributed to Isidore of Seville (Migne, LXXXIII, col. 152), where we read that "sinking already under the weight of age and feeling that the day of his departure was nigh, he ordered that a sepulchre be dug for him, and from there saying farewell to his brethren, he entered living into the tomb and lay down as in a bed." Similar scenes occur in a thirteenth century window in the cathedral at Tours, where we find it as here, connected with scenes from the life of the Baptist; in a window of the cathedral at Lyon, in others at Bourges, at Troyes, and at Chartres. The scene is also met with in miniatures, in a form even more closely resembling the sculptured group, and once again in sculpture, on the west façade of Reims Cathedral. (LOUISE PILLION, *R. Art Chrét.* 1904, pp. 181-189.)

The Chapel of St. Louis at St. Germain. — The chapel of St. Louis in the château of St. Germain-en-Laye was finished in June, 1238. It occupied the site of a chapel built by Philip Augustus, which was certainly in existence in April, 1223. Documentary evidence in support of these dates is cited by J. DULON, *R. Arch.* II, 1903, pp. 402-405.

Architectural Refinements in French Churches. — The *Memoirs of Art and Archaeology*, Vol. I. No. 4 (71 pp.; 31 figs.), published by the Museum of the Brooklyn Institute of Arts and Sciences, is a discussion by W. H. GOODYEAR of vertical curves and other architectural refinements in

the Gothic cathedrals and churches of northern France, and in early Byzantine churches at Constantinople. It is based on a series of observations during the summer of 1903, and contains in enlarged form the results presented at the Cleveland meeting of the Archaeological Institute (see *Am. J. Arch.* VIII, 1904, pp. 75-77). Appended is a descriptive list of 130 photographs taken during the survey.

GREAT BRITAIN

A Penannular Brooch.—*Proc. Soc. Ant.* XIX, 1903, pp. 298-305 (fig.), contains a discussion by R. A. SMITH of a penannular brooch found at the North Gate of Canterbury. Such brooches are rare in England, though found on the islands and west coast of Scotland, and frequently in Ireland. It is suggested that this specimen may have been lost at the storming of Canterbury by the Northmen in 851 A.D. It seems to be a Scandinavian edition of a Celtic original, of which the Tara brooch was the native development. This type may be referred to Scotie artists.

A Tau Cross Head.—In *Archaeologia*, LVIII, 1903, pp. 407-412 (pl.; 5 figs.), C. H. READ publishes a fine tau cross head, elaborately carved from walrus ivory. The two volutes seem to have terminated in griffins' heads, while the body of the curve is covered with conventional foliage in high relief and deeply undercut, which is entwined about fantastic animals. The faces bear on one side the crucifixion, and on the other, within a vesica, Christ triumphing over evil. Other examples of similar carved heads are given, and a brief discussion leads to the conclusion that the tau cross was pastoral, and early used in the place of the crozier. This specimen is English, and probably of the first quarter of the eleventh century.

Early Crosses.—In *Reliq.* X, 1904, pp. 35-42 (5 figs.), W. G. COLLINGWOOD describes three fragments of Anglian crosses at Hornby in Lonsdale, and some remains of Viking crosses at the neighboring Melling. The most important is a fine piece of carving at Hornby, having on one side a representation of the miracle of the loaves and fishes.

Norfolk Churches.—In *Athen.*, April 2 and April 9, 1904, J. C. COX publishes notes of a visit to ninety churches in the northeast corner of Norfolk. The buildings are, for the most part, of the fifteenth and early sixteenth centuries, though there are traces of pre-Norman work, and a number of examples of thirteenth-century constructions. It is noteworthy that the passage from decorated to perpendicular was later here than elsewhere in England, and the character of the window tracery is no sure criterion of date. The articles contain numerous details as to towers, fonts, rood-screens, and mural paintings, of all of which interesting examples are found in these parish churches.

Somerset Bench-ends.—The carved oaken bench-ends of Somerset, belonging in general to the later mediaeval period from about 1390 to 1550, are the subject of discussion by A. GORDON in *Reliq.* X, 1904, pp. 83-98 (14 figs.). Out of over a thousand such panels only a small number are described and illustrated, but a list is given of churches containing good specimens. Of special interest are three at South Brent satirizing the endeavor of the abbots of Glastonbury to secure the emoluments of the parish. The abbot appears as a fox, who after a temporary triumph is hung by the geese.

Brougham Castle.—In Westmoreland, near Penrith, on the road from York to Carlisle, are the ruins of Brougham Castle, situated at the site of the Roman station Brovacum. This castle is minutely described by E. TOWRY WHYTE in *Archaeologia*, LVIII, 1903, pp. 358–393 (pl.; 10 figs.). The keep is mainly Norman (c. 1170), but from the time of its building until it was dismantled in the seventeenth century almost every owner strengthened or improved it. This view is opposed to the usual statement that the castle is for the most part of two periods only.

Cogenhoe Church.—The Cogenhoe family and Cogenhoe Church, Northants, are discussed by A. HARTSHORNE in *Proc. Soc. Ant.* XIX, 1903, pp. 227–244 (plan; 6 figs.). The chancel of the church was built about 1225, the nave during the reign of Edward I, the south porch about 1380, and the tower about 1450. The church, though somewhat marred by restorations in 1870, is still a very interesting example of a group of transitional buildings in the Nene Valley.

The Church of St. Levan.—The little church of St. Levan in Cornwall is described in *Reliq.* X, 1904, pp. 43–51 (10 figs.) by CHARLOTTE MASON. It consists of chancel, nave of four bays, south aisle, north transept, south porch, and an embattled western tower with pinnacles. The transept is Early English of about 1220, though there are some remains of an earlier Norman church. Of special interest are the old benches of oak with very carefully and elaborately carved ends, which are said to be almost unequalled for execution and variety of design.

Restorations at Magdalen College.—Somewhat recently repairs and restorations have been made in the chapel porch of Magdalen College, Oxford, having in view the removal of the alterations made during the sixteenth and seventeenth centuries. The history of the porch and of the recent changes is given by R. J. GÜNTHER in *Proc. Soc. Ant.* XIX, 1903, pp. 153–170 (pl.; 4 figs.).

A Mediaeval Roll of Prayers.—In *Reliq.* X, 1904, pp. 99–112 (7 figs.), W. HENEAGE LEGGE describes an interesting mediaeval roll of vellum containing a set of private prayers written, apparently about 1485, by a Canon Percival of Coverham Abbey in Yorkshire. The manuscript is profusely decorated with leaf and animal forms, and also illustrated by many drawings of saints and emblems. All these are described in detail.

AFRICA

The Sarcophagus of St. Crispina.—In *B. Soc. Ant. Fr.* 1902, pp. 231–234, HÉRON DE VILLEFOSSE publishes from a letter of Bishop Toulotte a description of a Christian sarcophagus from the basilica of Tebessa in Algeria. One side has in relief between two torches, three repetitions of a female figure, standing, seated with a cup in her left hand, and standing with arms raised. This is probably the local martyr, Crispina of Tagora, whose *surrectio*, *sessio*, and *resurrectio* are prominent in the sermons of St. Augustine. This martyr seems to have been transformed later into Cristina of Tyre or Bolsena. This interpretation of the relief differs from that of Gsell, who sees in the seated figure a personification of Christian Rome.

Weights with Christian Symbols.—In *B. Soc. Ant. Fr.* 1903, pp. 226–228, P. MONCEAUX gives the results of the examination of a series of ancient bronze weights from northern Africa, containing Christian symbols. Five

groups are distinguished: weights of one, two, or three *unciae*; monetary weights referring to the Greek *κεράτιον* and to the Byzantine *νόμισμα*; weights based on the Roman pound of 327 grams; weights based on the *solidus* of 4.55 grams.

Christian Inscriptions of Africa.—In continuing his publication of the Christian inscriptions of Africa (see *Am. J. Arch.* VIII, 1904, p. 326), P. MONCEAUX devotes an article to Jewish inscriptions (*R. Arch.* III, 1904, pp. 354–373; 10 figs.) of which he has collected thirty-three (Nos. 120–152). More than half were found at Carthage. Three are in Hebrew, the others in Latin. Three are dedications, two acclamations, two *graffiti* on lamps, and the rest are sepulchral. Some are accompanied by interesting ornamentation, in which the seven-branched candlestick is of frequent occurrence. The article contains lists of proper names, formulae, and titles. It is noteworthy that there are decided differences between the Latin epitaphs of Carthage and those of Numidia and Mauretania.

A Christian Inscription from Anzia.—In *B. Soc. Ant. Fr.* 1902, pp. 224–226, P. MONCEAUX discusses briefly a Christian sepulchral inscription published from the papers of Regnier by Cagnat (*B. Arch. C. T.* 1887, p. 148, No. 642). It is of interest, as it is dated in the year 279 of the Mauretanian era (318 A.D.) and contains a curious mingling of pagan and Christian formulae.

De Donis Dei.—A discussion of the formula *de donis Dei* and its analogues in African inscriptions by P. MONCEAUX is summarized in *B. Soc. Ant. Fr.* 1902, pp. 245–247. These seem to be the Christian equivalents for the pagan *de suo fecit, de sua pecunia fecit*.

RENAISSANCE AND MODERN ART

GENERAL AND MISCELLANEOUS

The Influence of the “Mysteries” on the Art of the Fifteenth Century.—The sudden access of realism which one notices in the works of the painters and sculptors of the early fifteenth century, compared with the more symbolical productions of their immediate predecessors is treated from a new point of view in a series of articles by ÉMILE MÂLE, in *Gaz. B.-A.* XXXI, February, March, April, and May, 1904 (*Le Renouveau de l'art par les “Mystères”*). He points out that this change of treatment was too simultaneous, so to speak, and too widespread to have been originated by one artist or one school, and that the influence which caused painters to exchange the symbolical for the real must have existed everywhere in Europe. This influence he traces to the “Mysteries.” Incidentally he shows that the authors of the Mystery-plays borrowed wholesale from St. Bonaventura's *Meditations on the Life of Christ*, and it is to this source that some scenes apparently invented by the artists of the fifteenth century are to be traced. A very interesting example is the ‘Pietà.’ “The motive of the Virgin holding the body of her Son,” says M. Mâle, “appears in art precisely at the moment when representations of the Passion commence to be noted in France and particularly at Paris.” His articles pass in review the “Mysteries” and contemporary art (largely miniatures) and point out parallels from the opening scene of the typical “Mystery” to the death of the Virgin.

ITALY

The Use of Roman Monumental Lettering by the Artists of the Renaissance.—This subject was first brought to notice by R. Schöne's publication of Felice Feliciano's treatise on the forms of letters contained in a Vatican manuscript (*Eph. Epig.* I, 1872, p. 255). In *Rep. of K.* XXVII, 1904, pp. 56–60, J. POPPELREUTER gives a short catalogue of monuments showing the course which the return to the antique lettering took among the artists of the Renaissance, beginning with Piero di Niccolo's monument of Onofrio Strozzi, where the letters are more cursive than otherwise, and ending with Civitali's Vertini monument in the cathedral at Lucca, where the script is completely monumental. The chief agency in this return to the classic form was Mantegna, which may explain the fact that Feliciano dedicated his monograph to him.

Francesco da Bologna.—This type-maker, the assistant of Aldus Manutius and Hieronymus of Soncino, is to be distinguished from *Francesco dei Benedetti detto Plato*, and from *Francesco Raibolini da Bologna detto Francia*. His full name appears in a notary-act at Perugia in 1512 as *Franciscus Griffius*. He probably commenced his career at Venice about 1470–1475 with Nicholas Jenson, and at the death of the latter passed, along with his materials, to Aldus Manutius. We find him afterwards at Fano, Perugia, and finally at Bologna, where he was arrested for murdering his son-in-law in 1518. When and where he died we cannot be certain. He is chiefly noted for his connection with Aldus, whose types he spread all over Italy. (P. ARNAULDET, *B. M. Soc. Ant. Fr.* 1903, pp. 289–295.)

Reliefs by Leonardo da Vinci.—W. BODE, *Jb. Preuss. Kunsts.* XXV, 1904, pp. 125–141, discusses Leonardo as a sculptor and definitely ascribes four reliefs to him. The first described is the stucco-relief from a bronze original, preserved in the Victoria and Albert Museum in London, ascribed there to Leonardo under the title 'Discord.' The second and third he regards as practically of the same date, one being a Scourging of Christ in the university collection at Perugia, the other a Mourning for the Dead Christ, now in S. Maria del Carmine at Venice. The latter is dated by the group of donors to the right of the scene, one of whom Bode identifies with Federigo di Montefeltro; a scar is indicated between his eyes which came from a wound received in 1450. His little son, a baby, kneels beside him, and as this son was born in 1472 and appears to be hardly three years old in the relief, Bode dates the latter about 1474 or 1475. The 'Discord,' showing as it does some development, was done, he thinks, about two or three years later, and the fourth of the series, a Judgment of Paris, in the collection of Gustave Dreyfus at Paris, is seen by comparison with the preceding works to be earlier, probably among the first productions of Leonardo. The dates thus obtained show that the reliefs were done during Leonardo's period of apprenticeship in the *bottega* of Verrocchio.

The "Vergine delle Roccie."—E. DURAND-GRÉVILLE, after having examined the supposed Leonardo at Affori (see *Am. J. Arch.* VIII, 1904, pp. 332–333), is sure that the Affori picture is nothing but a copy, and a bad copy, not of the Louvre Madonna, but of that of the National Gallery in London, unless they are both copied from a replica. The Louvre Madonna is certainly the original one of the trio. (*Chron. d. Arts*, March 12, 1904, p. 88.)

A Fresco by Masolino.—Readers of Bernhard Berenson's 'Studies and Criticism,' will remember the frescoes at Castiglione Olona, which he discovered to be Masolino's. One of these, one side of a frieze which originally decorated the walls of a room in the Palazzo dei Castiglioni, is reproduced and described in *Rass. d'Arte*, 1904, pp. 75-76, by G. CAGNOLA. It is a landscape simply, and interesting as one of the few indications of an interest in landscape by itself on the part of the artists of the Renaissance. The steep, conical mountains reappear in Masolino's Baptism of Christ.

Little-known Works by Matteo di Giovanni.—Five paintings by Matteo di Giovanni, existing in Siena or its vicinity, are published for the first time in the *Rass. d'Arte*, 1904, pp. 65-68, by Lucy Olcott.

Titian's Sacred and Profane Love.—A brief summary of the explanations proposed for Titian's 'Sacred and Profane Love' is given by S. R. in *R. Arch.* III, 1904, pp. 277-278. He gives most of his space to a statement of the view of Palmerini that it represents Laura Dianti at the fountain in the forest of Ardennes. (See *Nuova Antologia*, August, 1902. *Am. J. Arch.* VIII, 1904, p. 334.) In *Nation*, January 21, 1904, R. GARNETT criticises Miss Keyes' interpretation (*ib.* December 17, 1903), objecting that as the first edition of the *Pervigilium Veneris* was printed at Paris in 1577, Titian and his friends can scarcely have known it some fifty years earlier. Moreover, the landscape does not suggest spring, nor the draped figure the *Virgo Delia*, who is plainly Diana. (But see *Am. J. Arch.* VIII, 1904, p. 74.)

FRANCE AND BELGIUM

Two "Livres d'Heures" of the Fifteenth Century.—L. DELISLE, in the *Bibl. Éc. Chartes*, 1903, pp. 314-320, describes a Book of Hours which once belonged to Jacqueline of Bavaria, Countess of Holland, now in the possession of the Comte de Murard. It is illustrated with fifteen miniatures, of which four were later additions made for a new owner. The first eleven are by an artist of talent, showing much originality in the composition. In the miniature of the Annunciation, the figure of Jacqueline is introduced, and her name appears in the verses at the bottom of the page. From internal evidence, Delisle concludes that the miniatures were commenced during the life of Jacqueline and completed after her death. The four miniatures at the end represent the family and genealogy of the subsequent owner of the book, a physician who inherited the volume, it appears, from François de Borselen, fourth husband of Jacqueline.

Ibid. pp. 321-328, P. DURRIEU writes of the relation existing between the "Très Riches Heures" of John of France, Duc de Berry, recently donated to the Musée Condé at Chantilly by the Duc d'Aumale, and the Grimani Breviary in the Biblioteca Marciana at Venice. It is evident that the miniatures in the latter, as well as in the so-called "Heures de Hennessy" in the Bibliothèque Royale at Brussels, are copies of the illustrations in the Chantilly Book of Hours. These copies are productions of a Flemish school named by Durrieu "l'école gants-brugeoise." This raises the question, how did the Duc de Berry's Book of Hours come to the notice of these Flemish artists? Durrieu shows that the miniatures of the Chantilly Book were finished long after the Duc de Berry's death in 1416, about 1485, for a new possessor, who was Charles I of Savoy. It is known that Margaret of Austria, widow

of Philibert of Savoy, when she removed to the Netherlands, carried with her a number of volumes from the collection of the House of Savoy, and an inventory of the household of Margaret at Malines describes a volume corresponding in many ways to the Chantilly Book of Hours. The "Très Riches Heures," then, after passing into the possession of the House of Savoy, was transported to the Netherlands by Margaret of Austria, and there its miniatures were copied by the artists of the Grimani Breviary and the "Heures de Hennessy."

A Marriage Coffin at Lyons.—The article by J. B. GIRAUD describing the marriage coffin of Bertholon Bellière (see *Am. J. Arch.* VII, 1903, p. 499) is published in full in *M. Soc. Ant. Fr.* LXII, 1901 (published 1903), pp. 9-18 (pl.).

A Painting by Watteau.—This painting is a 'Danse paysanne,' in the Museum at Dijon, hitherto attributed to Claude Gillot. P. MARCEL, in *Gaz. B.-A.* XXXI, 1904, pp. 372-378, shows that the picture is the work of Gillot's pupil, Watteau. The engraving after Watteau by B. Audran, called by the same title, seems at first sight to be a copy of the Dijon painting but is not. On the other hand, the latter is not a copy after the lost 'Danse paysanne,' the workmanship being too careless and hasty for a copy, and disclosing unmistakably the hand of Watteau. The other picture must have been superior to its surviving double, to judge from Audran's engraving, and the Dijon picture is so sketchily done as to admit of the possibility that it was a study for the one which Audran engraved.

An Illustrated Will.—In the *R. Art. Chrét.* 1903, pp. 476-477, is published a design which ornaments the heading of the last will and testament of Arnold Luyd of Tongres, priest and canon of St. Lambert at Liège. The will is in the possession of the Belgian archives. The design is done in india ink on the parchment. Arnold, in canon's robes, kneels at a *prie-Dieu*; behind him, also kneeling, is St. Jerome, a stone in his left hand, his hat and book on the ground, his cardinal's robe hanging over the branch of a tree. Both the saint and canon are adoring the Crucified. The crucifix occupies the left of the page and is unique in that the foot of the cross is occupied by a double eagle, on whose heads are standing the Virgin and St. John. Between the *prie-Dieu* and the cross stands a shield bearing the arms of Tongres. The will is written in Latin and Flemish and dated 1539.

GERMANY AND AUSTRIA

New Light on the Van Eyck 'Adoration of the Lamb.'—J. SIX in *Gaz. B.-A.* XXXI, 1904, pp. 177-187, calls attention to the fact that the headdress of the middle horseman in the rear rank of the 'Soldiers of Christ'—which is the name given to the group painted on that panel of the Van Eyck 'Adoration,' which is preserved in the Berlin Museum—has been repainted. What was originally a crown has been painted over into a sort of blue hood. This blue hood was part of the insignia of the partisans of Burgundy in John the Fearless' contest with the Orléanists, and Six identifies the figure with the duke, who must have ordered the crown repainted into the Burgundian hood from an assumption of modesty. If Six's conclusion is accepted, it is a confirmation of Paul Durrieu's recently published opinion (*Gaz. B.-A.* 1903, see *Am. J. Arch.* VII, 1903, p. 500), that the Berlin panel was done by Hubert van Eyck, unassisted by his brother,

about 1415, and not under Philip the Good. Six adds other evidence to this effect, supplementing Durrieu's results.

Identification of Two Portraits by Jan Van Eyck.—W. H. J. WEALE, in the *Burlington Magazine*, 1904, pp. 190–192 (3 pls.), discusses two portraits by Jan Van Eyck in the Imperial Gallery at Vienna. The first has been supposed to represent Jodocus Vydt, the donor of the Ghent altar-piece, or Cardinal Domenico Capranica. Weale shows that the picture is the portrait of the blessed Nicholas Albergati, titular cardinal of S. Croce in Gerusalemme. The drawing in silver-point preserved in the royal cabinet of prints in Dresden, identical with this picture, is the sketch made for it during the cardinal's visit to Bruges on his mission from the Pope to the Duke of Burgundy. Weale has deciphered some of the notes on the right side of the drawing, and they turn out to be jottings made by the painter, whose model's stay in Bruges was short, to help his memory in completing the portrait; for example, "the nose reddish, the lips very whitish," etc. The other work is a portrait of Jan de Leeuwe, a wealthy craftsman of Bruges.

A New Dürer Drawing.—In the *Jb. Preuss. Kunsts.* XXV, 1904, pp. 119–124, S. M. PEARTREE publishes for the first time a drawing by Dürer preserved in the Kupferstichkabinett of the Kunsthalle at Hamburg. It represents a pair of lovers walking toward the right, the youth's right arm around his sweetheart's waist, and her left hand clasped in his right. The features of the youth are decidedly those of the Dürer portraits. The writer dates the drawing shortly after 1490, and on account of some striking coincidences in the matter of costume, he argues that the Hamburg drawing must have been done in the same place as the Basle Terence illustrations and the book-illustrations related to them. Moreover, the technical coincidences of the Hamburg work and the Basle drawings, whose connection with Dürer's work was already suspected, have convinced Peartree that they are by the same hand.

Painting on the Upper Rhine.—A contribution to the history of the northern Renaissance has been made by A. SCHMARSOW in a study of the painting along the upper Rhine and its vicinity about 1430–1460. The artists treated are Konrad Witz of Basle, Hans Multscher of Ulm, and Lucas Moser of Weil. (*Die Oberrheinische Malerei und ihre Nachbarn um die Mitte des XV Jahrhunderts* von A. SCHMARSOW. *Abh. Sächs. Ges.* XXII. 2. Leipzig, 1903, B. G. Teubner; 112 pp.; 5 pls.; 8vo; m. 4.)

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PROFESSOR NATHANIEL SCHMIDT (*Cornell University*).

Archaeological
Institute
of America

TWENTY-FIFTH ANNUAL REPORT OF THE
COUNCIL OF THE ARCHAEOLOGICAL INSTI-
TUTE OF AMERICA

To the Members of the Institute :

I have the honor to submit, on behalf of the Council, the following report on the affairs of the Institute from September 1, 1903, to August 31, 1904.

The Annual Meeting of the Council was held in New York on May 14, 1904. Seventeen Councillors were present in person, and two others sent deputies. The sessions were held in the building of the New York Academy of Medicine, at 17, West 43d Street, and the Council desires to express to the Officers of this Academy of Medicine its hearty appreciation of their courtesy.

The Council herewith submits the reports of the Chairmen of the Managing Committees of the Schools in Athens, Rome, and Palestine, of their Directors, and of the incumbent of the scholarship in American Archaeology.

In accordance with the plans indicated in the last preceding report, the Secretary of the Institute went as its agent to the Pacific slope in the autumn of 1903, and assisted in the organization of several new archaeological societies, of which two are already affiliated with the Institute,—the Society of the Southwest, with headquarters at Los Angeles, and the Colorado Society, with local secretaries at Denver, Boulder, Colorado Springs, and Pueblo. The San Francisco Society is expected to become affiliated with the Institute in the course of the present

year, and the organizations at Salt Lake City and at Kansas City are likely to increase in strength, to exert a useful influence in the community, and later to become connected with the Institute. The Council acknowledges its indebtedness to Professor D'Ooge of the University of Michigan, who preceded his colleague Professor Kelsey in his visit to the Western cities, and assisted in preparing the way for him. An effort will be made in the course of the coming winter to form new Societies in the South.

The growth of the Pennsylvania Society deserves special mention. Since the publication of the last report, five life members and sixty-two annual members have been added to this Society, which four years ago had but four life members and thirty-five annual members.

The Society of the Southwest has shown unusual and very commendable zeal and activity, under the stimulating guidance of its Secretary, Dr. Charles F. Lummis, from whose brief summary of the work of this Society, published in his periodical *Out West*, for September, the following is quoted:

"Beginning in the week of its foundation, the Society has been steadily engaged in preserving the historic folk-songs of California, Arizona, and New Mexico; working in a field of enormous extent and richness, but as perishable as it is precious. . . . The old people are dying or dead, the young ones are sophisticated; and the songs are disappearing like snow before a July sun. . . . The Southwest Society has already made more than 450 phonographic records of such songs,—including about 110 in different Indian languages, the rest being in Spanish. . . . The Society has been fortunate in finding many of the surviving individuals who still remember the old songs, and is indebted to their public spirit for the records thereof. The Archaeological Institute has sent out to collaborate with the Society, Professor A. A. Stanley, of Ann Arbor, one of the leading American experts, in consultation with Mr. Arthur Farwell of Newton Centre, Mass., who is one of the best-equipped specialists in the country for this sort of work. Mr. Farwell will be occupied for three months or more in the transcript of these songs.

"Besides the activities already referred to, the Southwest Society has taken definite steps for the foundation, in the city of Los Angeles, of a free public museum. . . . Besides the Caballeria collection of paintings and books [books from the old libraries of the Franciscan Missions of California, and thirty-four oil paintings (sixteen of which are more than two

centuries old) which hung in these Missions before the "secularization" of 1834], it has purchased the second best collection in the world of archaeological artifacts of Southern California. . . . It has also well advanced a comprehensive picture archive of the Southwest,—bound collections of permanent photographs of everything in the Southwest, both ancient and modern."

The story of the achievements of the Society of the Southwest, in the first nine months of its existence, may well prove stimulating to some of the older Societies. The founders of the Institute did not plan for an organization in which each member's work should consist in paying the annual fee, although the support of such members is heartily welcomed. During the early years of the Institute, the annual fees did not half suffice for the scientific explorations which were undertaken. The Affiliated Societies of the Institute are now widely separated and in varying circumstances. The activity which is incumbent upon one Society may be unnecessary for another, but perhaps most of the Societies may to advantage increase the intensity or widen the sphere of their work. At its May meeting, the Council was earnest in its desire that the Societies of the West should exert a strong influence in favor of the preservation of ancient monuments and, where necessary or proper, that they should take the lead in arousing public sentiment and in securing the necessary legal measures to this end.

The new Societies of the Institute in the West, in the midst of monuments of American antiquity, naturally have special interest in the researches of American archaeology, and they will be glad to have work done by the Institute in their regions, and in such a way that they may have the objects discovered in the explorations, for the benefit of their museums. With this interest and these desires the Council is sure to sympathize.

Since the Institute undertook the support of the *Journal of Archaeology*, its income has been little more than sufficient for what may be called fixed charges,—the support of the *Journal*, and of the four fellowships, one each in the School at Athens, the School in Rome, the School in Palestine, and that in American

Archaeology ; the expenses, also, for lecturers, for the general meetings, and for miscellaneous printing and clerical assistance. The *Journal* and the fellowships have seemed its most effectual means of furthering archaeological study and research ; the general meetings and the lectures have proved useful instruments. In addition to the enumerated ordinary expenses, the Institute has advanced \$2500 toward the expenses of the *Heraeum* publication, part of which sum may be repaid hereafter ; and has paid \$2400 for the publication expenses of the School in Rome, \$500 for excavations at Corinth, and \$250 toward the expense of preparing the plates for the Assos publication. The gratifying increase in the number of members, and thus in the income of the Institute, causes comparatively slight increase in its expenses, and thus the Council will be enabled to undertake a more considerable enterprise than has been practicable for it in recent years. Very likely it may decide to expend all its free income for two or three years in some particular field, but it will do so without partiality, intending to turn its attention later in other directions.

The Committee on American Archaeology has been authorized to add to its number, and has been requested to present to the Council at its meeting in January a plan for extended work in its department. The fifth regulation of the Institute has been amended, to make the Chairman of the Committee on American Archaeology a member of the Executive Committee, *ex officio*.

In view of the rapid destruction and spoliation of the remains of the aboriginal tribes in this country, the Council, at its May meeting, created a Committee on the Preservation of the Remains of American Antiquity. Each Society of the Institute is represented on this Committee, which is constituted as follows: *Chairman*, the President of the Institute ; *Secretary*, the Secretary of the Institute ; Mr. C. P. Bowditch, of the Boston Society ; Professor Franz Boas, of the New York Society ; Miss Alice Fletcher, of the Baltimore Society ; Mrs. Sara Y. Stevenson, of the Pennsylvania Society ; Dr. George A. Dorsey, of the Chicago

Society; Mr. George Williams Bates, of the Detroit Society; Professor M. S. Slaughter, of the Wisconsin Society; Professor H. N. Fowler, of the Cleveland Society; Mr. George Grant MacCurdy, of the Connecticut Society; Dr. W J McGee, of the Missouri Society; Professor M. Carroll, of the Washington Society; Dr. Duren J. H. Ward, of the Iowa Society; the Hon. H. K. Porter, M.C., of the Pittsburgh Society; Dr. Charles F. Lummis, of the Southwest Society; Dr. A. L. Kroeber, of the San Francisco Society; Mrs. W. S. Peabody, of the Colorado Society; Professor F. W. Putnam, of the Peabody Museum; Mr. W. H. Holmes and Dr. J. W. Fewkes, of the Smithsonian Institution; the Hon. J. W. Foster and the Rev. Dr. H. M. Baum, of Washington, D.C.; and the Hon. L. Bradford Prince, of Santa Fé, N.M.

This Committee on the preservation of monuments met in St. Louis on September 22, when thirteen members were present and three others were represented. After a free discussion, a sub-committee was constituted, and instructed to urge upon the national Congress the passage of a bill similar to the Act 5603 which passed the United States Senate on April 26, 1904. This sub-committee consists of the President of the Institute; Mr. C. P. Bowditch, of Boston; the Hon. J. W. Foster and Mr. W. H. Holmes, of Washington; and Professor F. W. Putnam, of the Peabody Museum. The Institute, being a national organization, having affiliated Societies both in the East and the West, including in its membership the heads of the principal American museums, as well as explorers, and scholars who are interested not merely in American, but also in Classical, Oriental, and Egyptian archaeology, has peculiar facilities for ascertaining what is best and what is practicable, and no other body could be less prejudiced and self-seeking in its action. The Committee constituted by the Council does not conclude its services with its meeting in St. Louis. After the passage of the general bill to provide for the preservation of ruins on public lands, which all agree is most urgently needed, other more special measures may be devised or supported.

The Institute is under obligations to Professor George F. Moore, of Harvard University, and Professor Arthur Fairbanks, of the University of Iowa, for their services as lecturers before the Affiliated Societies of the Institute in the winter of 1903-04. Professor Moore lectured on 'Recent Excavations in the East.' Professor Fairbanks lectured on 'The Eleusinian Mysteries,' at brief notice taking the place of Dr. McGee, who was prevented by ill-health from meeting his engagements as lecturer. The President of the Institute had the pleasure of addressing all the Societies, except those most recently formed, on 'Archaeological Excavations in Greek Lands.'

A Committee on Art has been created by the Council, consisting of Professor Marquand, of Princeton University, Professor Hamlin, of Columbia University, and Professor Brown, of Wellesley College. This Committee has proposed to the Council the establishment of a fellowship in mediaeval and renaissance studies, to be held in connection with the School of Classical Studies in Rome.

The second volume of *The Argive Heraeum*, by Professor Charles Waldstein and his assistants and associates in the excavations on that ancient site, is in type, and may be published at the same time with this report. This elaborate and important work is published by the joint authority and at the common expense of the Institute and the School at Athens, which also shared the expense of the excavations. The attention of the members of the Institute is called once more to the fact that they may obtain this work at a lower price than could be offered to the general public, viz. \$20 for the two large quarto volumes.

The first volume of *Papers of the American School in Rome* is now in type, and its publication may be expected in the course of the winter. For these papers the *Journal of the Institute* had no room at present, and some of them could be published to advantage in a larger form.

The work on the publication of the drawings made at Assos, in connection with the excavations of the Institute there, a

little more than twenty years ago, is making good progress. Parts II-V will be issued together, not separately.

The fifth *Bulletin* of the School at Athens, being a systematic and well-illustrated account of the excavations on the site of ancient Corinth, has been prepared by Dr. Heermance, the present Director of the School at Athens, and Mr. B. H. Hill, a former Fellow of the School; and while it is to be considered only a preliminary, and not the definitive, publication of the results of the explorations at Corinth, it is to be much more systematic than it was possible to make the previous annual reports of the progress of the work. The publication of this *Bulletin* is expected in the course of the year 1904-05, and a copy will be sent to every member of the Institute.

Arrangements are making, but are not yet perfected, for the publication of the relief sculptures of the Triumphal Arch of Trajan at Beneventum,—with an introduction on the origin and history of Roman memorial arches and of Roman historic reliefs before Trajan, by Professor Frothingham, of Princeton University,—in a large quarto volume, with numerous illustrations, including nearly thirty full-page photogravure plates of all the reliefs of the arch. The plates are made from photographic negatives taken in 1896, when the scaffolding was in place for the making of moulds from the arch, under Professor Frothingham's direction.

In order to encourage and facilitate the forming of complete sets of the *Journal of the Institute*, which obviously have far more value than isolated volumes, the Council allows members of the Institute who have joined it since 1897, and thus have not received all the volumes of the *Journal*, to complete their sets by the payment of three-fifths the ordinary price, or \$3, instead of \$5, a volume. Those who desire six or more of the volumes may obtain them at half-price, or at \$2.50 a volume. Naturally, this offer can hold good only while the stock of copies on hand may seem to warrant it. Such applications should be made to the Business Manager of the *Journal*, Professor C. H. Young, of Columbia University.

The fifth General Meeting of the Institute, for the reading and discussion of papers on archaeological themes, was held at Adelbert College of the Western Reserve University, Cleveland, O., on December 29, 30, and 31, 1903. The attendance was somewhat smaller than at the meetings held near the Atlantic seaboard, but the interest expressed was as great as usual. The thanks of the Institute are due to the authorities of Adelbert College and to the Cleveland Society of the Institute for their hearty and thoughtful hospitality.

In his last report, my predecessor, Professor White, stated clearly cogent reasons in favor of holding the meetings of the Council and of the Managing Committees of the Schools at Athens and in Rome in connection with the General Meeting of the Institute for the reading and discussion of papers on archaeological themes. This connection seemed best for the Council and for the Committee of the School in Rome. The Managing Committee of the School at Athens was in doubt as to the proposed arrangement being best for its members, but consented to make the trial by calling a special meeting. Thus the next meeting of the Council and the Managing Committees of these two Schools, as well as the sixth General Meeting of the Institute, will be held in Boston, at the Massachusetts Institute of Technology, on December 28, 29, and 30, 1904. By this combination of the meetings for business purposes with those for scientific ends the Council hopes to induce a larger attendance at both. Only a few years ago, scholars in this country needed the stimulus of more frequent meetings with their peers, but the number of educational and scientific organizations has so increased that the gatherings are a serious interruption to a scholar's work, and combination is necessary. The problem is not simple, however, for the so-called Convocation Week is in danger of becoming overcrowded with meetings. Probably the number of papers read at the General Meeting may need to be reduced somewhat, or a division into sections may be made for the hearing of technical papers, which have little general interest. Already the Institute is invited to

hold its General Meeting of 1905, in connection with that of the American Philological Association, at Cornell University.

The following resolution, passed unanimously by the Council on the retirement of Professor White from the Presidency of the Institute in 1903, deserves not merely a place on its records, but also to be communicated to all the members of the Institute :

“ Resolved : That the Council of the Institute hereby expresses to Professor John Williams White, who has resigned the Presidency of the Institute, its very hearty appreciation of his very energetic and skilful administration of the affairs of the Institute, and assures him that his resignation is accepted with sincere regret. The Council hopes that his experience may long be at the service of the Institute.”

The passing of Mrs. Henry Whitman, the President of the Boston Society of the Institute, is a loss to many other worthy causes as well as to our own. She was a lady of unusual gifts and accomplishments, and her graces and powers were all directed to the attainment of noble ends.

The Council has elected to Honorary Membership in the Institute two distinguished archaeologists, M. Théophile Homolle, — for many years at the head of the French School at Athens, and in charge of the excavations at Delphi and on the island of Delos, but now Director of the Museums of the Louvre, — and Dr. Arthur John Evans, of the Ashmolean Museum, whose excavations on the site of ancient Cnosus have been not only marvellous in their results but admirable in their method.

To the Society for the Promotion of Hellenic Studies, which celebrated in July last the twenty-fifth anniversary of its founding, the Council sent a formal Latin address of congratulation on its achievements, and at the request of the Council, Professor John Williams White, of Harvard University, Honorary President of the Institute, acted as its representative at the anniversary meeting in London.

Professor James R. Wheeler, of Columbia University, has been invited by the Council to represent the Institute at the gathering of archaeologists in Athens, in the Easter holidays of 1905.

Our Institute was founded on May 10, 1879, and thus has just completed its twenty-fifth year. The present Supplement to its *Journal*, — with the reports from its affiliated Schools and its fellowship in American Archaeology, and the lists of members of its fifteen Societies, — is sufficient to indicate the extension of its work and influence. Seldom before has the growth of membership been so rapid as in the year just passed. Abundant encouragement is offered for our work, but as in every other undertaking, unremitting diligence is necessary if our proper end is to be attained.

For the COUNCIL,

THOMAS DAY SEYMOUR, *President*.

YALE UNIVERSITY,
October 1, 1904.

American School
of Classical Studies
at Athens

TWENTY-THIRD ANNUAL REPORT OF THE
MANAGING COMMITTEE OF THE AMERICAN
SCHOOL OF CLASSICAL STUDIES AT ATHENS

To the Council of the Archaeological Institute of America:

GENTLEMEN,—I have the honor to submit, in behalf of the Managing Committee of the American School of Classical Studies at Athens, the following report on the affairs of the School from September 1, 1903, to August 31, 1904.

The hope expressed in my last report that the George Washington University (formerly the Columbian University), of Washington, D.C., would soon coöperate with the institutions which support the School has been realized, and Professor Mitchell Carroll has been chosen as its representative on the Managing Committee. The membership of the Committee has further been increased by the election of Professor William E. Waters, of the New York University. The other representative of that University, the venerable and greatly respected Dr. Baird, has for some years past been unable to attend the meetings of the Committee, owing to failing health, and the election of a second representative seemed fitting. Professor J. Irving Manatt, also, of Brown University, has accepted an election to membership on the Committee.

The present year, for the fourth time, the School makes grateful acknowledgment to Mr. Elliot C. Lee and Mr. J. M. Sears, who have respectively given \$1000 and \$500 toward the excavations at Corinth. This money has made it possible to carry on the season's work. Other no less welcome gifts are

recorded in the list of contributors for the year, and one of these, that of Mr. Clarence M. Hyde of New York, who has often remembered the School with gifts in past years, will be used to purchase a stereopticon. The Directors have felt the need of this for some time.

At the annual meeting of 1903 it was voted to ask Professor Charles Eliot Norton to prepare a memorandum on some matters connected with the early history of the School, the record of which must in large measure depend upon his memory. Professor Norton kindly acceded to this request, and the memorandum has been published at p. 351 of the *Journal of the Institute* for 1903.

The plan of printing the report of excavations in a regular number of the *Journal* has been carried out, and such a report for last year will be found at p. 350 of the volume for 1903. The excavations of the present year will be reported in the current volume. The special Bulletin on the excavations at Corinth which the Managing Committee voted to print over a year ago has been unavoidably delayed. The preparation of the material has taken more time than was expected, but the Director reports that it is now nearly ready and the work of printing should not take a great deal of time. The special Committee which has the matter in charge consists of Professor Wright, the Director, who asks that Mr. B. H. Hill of the Museum of Fine Arts in Boston shall represent him in this country, and the Chairman; and now that Professor Richardson has returned to this country before the time of publication, the Committee hopes for his coöperation and suggestion.

I am sorry to report that the second volume of the *Argive Heraeum* is not yet published. The delay, vexatious alike to many of the authors and to those who have made contributions, has been caused by the failure of the editors to receive promptly the manuscript and later the proof of the chapter on bronzes. The printing of this portion of the work is, however, now well under way, and the early completion of the volume may be expected.

The School has further undertaken the publication of careful drawings of the Erechtheum with an archaeological discussion of the temple and of the various inscriptions which relate to it. The work is well advanced, and its present state is set forth in the report of the Director. The School has never entered upon a more useful and important undertaking than this. The book is sure to be not only a thing of beauty, but a matter of permanent scientific value; and there can hardly be any doubt that the financial side of the matter will be more easily managed than has been the case in some other of the School's publications. Mr. Stevens, the Fellow in Architecture, who has made the admirable drawings for this publication, besides preparing the plans of the excavations at Corinth for the Bulletin, has earned the gratitude of the Managing Committee both for the admirable character of his drawings and for his tireless industry in prosecuting his work. He has also made it evident that a permanently established fellowship in Architecture is greatly to be desired. The financial condition of the School will hardly warrant the necessary outlay for this at present, but there can be no doubt that such a fellowship would render the work of the School more effective and more widely useful.

Besides the more extended and special publications, the Managing Committee regards with satisfaction the evidence of activity on the part of members of the School which is afforded by recent volumes of the *Journal of the Institute*. These amply attest the fidelity and enterprise with which the work in Athens is carried on.

The regular Fellowship examinations were held as usual in March, with five candidates, and as a result Oliver Miles Washburn, A.B. of Hillsdale College, formerly Fellow of the university of Chicago, and a student of the School in Rome 1899-1900, was appointed Fellow of the Institute, and Ralph Cecil McMahon, a graduate of Wesleyan and Columbia universities, and a student in Athens last year, received the appointment of Fellow of the School. Professor Leach now

wishes to give up the Chairmanship of the Committee on Fellowships, and I take pleasure in expressing to her the sincere thanks of the Managing Committee for the very efficient service which she has rendered the School. The work of the Chairman of this special Committee is no light matter, and the reward of the labor must rest chiefly in a sense of the great importance of the work to the best success of the School.

At the request of the Director one or two minor changes in the Regulations governing the management of the School have been made: Regulation X has been so modified that others than the officers and students may take part in open meetings. This is a mere confirmation of what has long been a custom. Regulation XII has been amended by substituting the term "Associate Members" for "Special Students."

The question of changing the time of the annual meeting of the Managing Committee to the Christmas season was fully discussed at the meeting last May. The Committee seemed decidedly opposed to making any change, but out of deference to the remarks of the President of the Institute it was voted to have a special meeting next December, and the Chairman was requested to ascertain so far as possible before that time the views of the whole Committee on the question.

As to matters in Greece, the Director's report is so full that I may touch on them very briefly.

There have been eight students in residence, two of whom are "Associate Members." These eight represent nine different institutions, and of these institutions two do not support the School—the University of North Carolina and the Massachusetts Institute of Technology. Both from the Director's report and from private letters which he and others have written, it is plain that the work in Athens has been going on in a highly satisfactory manner. The Director already has a firm grasp of the affairs of the School, and there is no doubt in the mind of the Committee that he is the right man in the right place.

There is still unfortunately the perennial anxiety in regard

to the School's income. The Endowment Fund, which by careful economy has now come to yield annually about \$3600, and the subscriptions from the supporting institutions, which usually amount in each year to about the same sum, are practically all that can be depended on; and it is no doubt greatly to be desired that the subscriptions of the supporting Universities and Colleges should be reduced. At present this would certainly work disaster, for even now the activity of the School could be extended to good purpose, if there were the means to make this possible. The Director points out in his report the need of a small excavation fund which could be counted on, but with the Endowment Fund still incomplete, it is a question whether an effort to raise such a special fund would at present be wise. In the meantime most creditable work is being accomplished even with the limited means.

For the coming year Professor Joseph Clark Hoppin, of Bryn Mawr College, has the appointment to the annual professorship, and in 1905-06 Professor William N. Bates, of the University of Pennsylvania, will succeed him. Both of these gentlemen are already well known in Athens.

For the MANAGING COMMITTEE,

J. R. WHEELER, *Chairman.*

COLUMBIA UNIVERSITY.

REPORT OF THE DIRECTOR

1903-1904

To the Managing Committee of the American School of Classical Studies at Athens:

GENTLEMEN,—I have the honor to submit the following report on the affairs of the American School for the year 1903-04.

The School was formally opened for the year on October 1 with brief talks by Professor Fowler and myself. On October 20, after the first travelling was over, I commenced my lectures and continued them weekly — with three unavoidable exceptions — up to the time of the Fellowship Examinations. Until the middle of December I discussed, on and about the Acropolis, the elements of Greek architecture, confining myself almost entirely to the constructional side of the subject, a knowledge of which is all-important for intelligent and appreciative visiting of ancient remains, and which is, furthermore, the least satisfactorily got from existing handbooks. I endeavored to show what inferences could be drawn from single stones as to the processes employed and what evidence they afforded for the reconstruction of the building as a whole. It seemed worth while to do this in view of the helplessness which most students display when asked to interpret a mass of ruins. After the date mentioned, I lectured — chiefly in the National Museum — on pre-Mycenaean and Mycenaean antiquities and concluded the series with some talks on such of the earlier classes of Greek pottery as are particularly well represented in Athens. Here it was my aim to avoid, so far as possible, covering the ground traversed in the several handbooks, and to approach the subject from new points of view, laying

especial stress on the more recent discoveries and the changed attitude they necessitate toward objects longer known.

Professor Fowler's connection with the School, as my colleague for the year, has been helpful in every way. I have had his hearty coöperation at all times and have profited repeatedly by his counsel, while the students have been aided and stimulated both individually and as a body. He thus describes his work at the School: "Before the end of October, I began my lectures on sculpture in the museums and continued to lecture until after the middle of January. About half the time I lectured twice a week and should have done so until my departure for Egypt, in January, but for the fact that there seemed to me to be too many lectures. I was able, in my lectures, to discuss more or less fully all the more important sculptures in the two museums. I also worked more or less with the Director and Mr. Stevens on the measurements of the Erechtheum. In May I examined in detail the fragments of the frieze of the Erechtheum to see if anything further could be learned about its composition and meaning."

As heretofore, the members of the School have been invited to attend courses of lectures given in other archaeological institutions at Athens, viz. on Athenian Topography, by Professor Dörpfeld of the German Archaeological Institute, on Greek Inscriptions, by Dr. Wilhelm of the Austrian Institute, and on the Bronze Age in the Aegean Basin, by Mr. Bosanquet of the British School. Thanks are due to these gentlemen for their courtesies in extending this valuable privilege to the American students.

The exercises of the American School were in part attended also by members of the other Schools and by a limited number of Americans for the time being resident in Athens.

The question of the number of lectures weekly which should be given in the School is a serious one, in view of the various lecture privileges outside the School available each year, and in view also of the usual duration of lectures in Athens — from one and one-half to two and one-half hours. This, with the time

taken in going to and fro, means that a forenoon or an afternoon is practically consumed by a single exercise, with the inevitable result that if a student attends all the lectures given, as is sometimes the case, he does not have sufficient time for consecutive reading and investigation by himself. The lecture-going habit of the American student is notorious in Athens, but it is doubtful whether to attend lectures is making the best use of his time; for sooner or later he must become accustomed to rely on the results of his own investigations, in distinction from having his thinking done for him. There is no better place than Athens for a student to break with his earlier traditions of mode of work, in view of the opportunities there offered of access to books and to unpublished new material for study. If he devotes himself to independent research under proper direction, cutting down attendance on lectures, he may at the end of the year have learned fewer facts, but he will have acquired something more important — the power to weigh facts and draw conclusions. If my point of view is the true one, as I think it is, after careful observation of the conditions here, — and with it the feeling of the more thoughtful students is in agreement, — the number of lectures given should be kept as low as may consistently be done, and they should aim to teach method rather than anything else.

It is a matter for keen regret that students come to the School each year with so little preparation in the elements of those subjects most studied in Athens that they must spend the greater part of the year in making up this deficiency. If they are to be in residence a second or a third year, it is not so much matter, but unfortunately this privilege is denied to most. It were very much better that students with the prospect of but a single year in Athens should plan to come with so much as is possible of the preparation demanded of the competitors for the School fellowships, postponing, if necessary, for a year or two their coming to the School. They would then be in a position to get more out of their residence here.

Circumstances requiring my presence in Athens prevented

my conducting the students to as many archaeological sites in the interior as I had intended before the setting in of the rainy season. Early in October, with two students I went overland through Megaris and southern Boeotia to Delphi, where others from the School were met who had come with Professor Fowler by sea. After two days spent at Delphi the party struck north to Thermopylae and Lamia, from whose port a steamer back to Athens was caught. This journey took twelve days. A five-day journey in the latter part of the month was made to Olympia by Professor Fowler and such of the students as had not already been there. In the first week of November the usual trip to the sites in the Argolid was made by sea, the return by rail permitting a stop at Corinth. This year the winter and early spring have been less favorable than most for travelling, but in one way or another the larger number of the points of interest in Attica have been visited. More recently the students have travelled farther afield, — in Boeotia, Peloponnesus, to Crete and in Asia Minor, — some in one, some in another direction, singly or in groups.

Public meetings have been held as usual, in conformity with the regulations of the School, with the following programmes:

- March 4. THE DIRECTOR: I. Excavations at Corinth in 1903.
II. The Chronology of the Building Remains of Corinth.
March 21. THE DIRECTOR: Architectural Miscellany from Corinth.
PROFESSOR FOWLER: Phidias and the Sculptures of the Parthenon.

Through the extreme courtesy of Professor Dörpfeld in extending to us the use of the stereopticon of the German Institute, the first of these meetings was fully illustrated with lantern slides.

All the students who were enrolled at the beginning of the year as "regular members" will comply strictly with the requirements of residence and the preparation of a thesis. The field covered by their investigations is a most varied one, as will be seen from the following statement of the work of each, and I believe that in addition to the benefit accruing to the

individual students — which is the chief end to be had in view — there will also be some results attained of permanent value to scholars in general.

Mr. Hastings, Fellow of the Archaeological Institute, was busy in the early part of the year on some original material contained in a Bronze Age deposit from Avgo (near Kavousi) in Crete. Later, he has been investigating the question of the connection of the figures represented on Attic grave-reliefs with the persons named in the inscriptions they bear, finding more instances where a partial or complete identity of person is probable than had been granted by previous writers. This was a subject to be satisfactorily undertaken only in Athens, as it often involved a minute examination of the originals, publications not proving adequate for what was demanded of them.

Mr. Caskey, Fellow of the School, has examined the mass of published Greek inscriptions and collected the technical words on Greek architecture and building, some seven hundred to eight hundred in number. He has classified them and purposes to study them group by group, though this study has proved to be too great a task to be completed this year. He has handed in as his thesis a discussion of the Portico of Philon, at Eleusis, based on a comparison of the remains preserved of the building and the inscriptions dealing with its construction, in the latter of which he has filled satisfactorily a considerable number of *lacunae*. In addition to his services as librarian, Mr. Caskey rendered valuable assistance in the preparation of illustrative material — plans and cartoons — for the open meetings.

Miss Hall, Agnes Hoppin Memorial Fellow of the School, has chosen "Mycenaean Design" as her field of work. She has drawn and studied thoroughly the decoration of the originals in the two richest collections of objects of this period — the museums of Athens and Candia — and has included specimens in other museums, so far as they are accessible in publications. To this collection of material there succeeds its

analysis, on which she is at present engaged, and which she will complete in her second year of residence at the School. It will comprehend the origin and development of the several motives, of their elaboration and simplification, their degeneration, the influence of material and technique and of the space to be decorated in the designs, and similar considerations. Miss Hall also accompanied Miss Harriet Boyd to Crete, to assist her in the excavations at Gournia.

The opportunity of access for examination and measurement given by the scaffolding erected successively about different parts of the Erechtheum—such as no ladders could possibly afford—rendered this year the best of all years for the making a set of drawings, the necessary antecedent of a much to be desired new publication of the building. This was one of the things I had in mind last year in urging the appointment of a Fellow on Architecture, hoping that it might be possible for him to undertake this work.

At the end of October, immediately after the arrival of Mr. Stevens, the incumbent of this Fellowship, I made application to Mr. Kabbadias, Ephor General of Antiquities, that permission be granted to Mr. Stevens to measure and study the Erechtheum with a view to such a new publication of the temple. With the liberality which has always characterized the attitude of the Greek authorities toward the foreign Schools, the desired permission was granted as soon as Mr. Kabbadias returned from Asia Minor, and Mr. Stevens began work immediately. The School is to be congratulated that one of its members is engaged in this coveted task, and also in having one of Mr. Stevens's accuracy and skill to represent it in this work.

The series of drawings which are necessary to exhibit properly the beauties and peculiarities of this unique building includes plans, elevations of both exterior and interior, and sections—a double series, showing the building as it exists to-day and also as it may be restored: furthermore, details of the several orders, perspectives and details of construction. The examination of the building has been made—except where the scaffolding has

not yet been erected — and the drawings are well under way, though their completion will require that Mr. Stevens spend most of his summer in Athens. This is because he has been able, by dint of much scrutiny of fragments scattered all over the Acropolis and even outside it to discover far more of the construction of the upper parts of the building than was believed possible. Every one who has seen the drawings is loud in their praise, and it is highly desirable that their publication should be in every respect worthy of them, as it is not too much to say that they form the most complete set ever made of a monument of Greek architecture.

Not to Mr. Kabbadias alone are the thanks of the School due, but also to Mr. Balanos, the architect in charge of the repairs, for his friendly interest, and to Professor Dörpfeld, who, with his wonted generosity, has put at Mr. Stevens's disposal his entire store of knowledge of the Erechtheum and its problems.

First and last during the year, I myself, as well as Professor Fowler, have spent a good deal of time on the Erechtheum, discussing various matters with Mr. Stevens and making independent observations, particularly with reference to the interpretation of the inscriptions describing the construction of the temple. At my earliest opportunity I hope to take them up more systematically. Not only are they of importance in preparing the text to accompany Mr. Stevens's drawings, but they themselves, with a full commentary, should be an integral part of the Erechtheum book.

The architectural work on the Erechtheum is a unit and should be done by a single hand; it must also be done without delay, as it is dependent on the scaffolding. In view of its involving more labor than was anticipated, I trust the Committee will approve my action in not requiring that Mr. Stevens give much of his time to architectural work connected with the excavations at Corinth. Pressing as the need for this is, it has waited so long that it can, if necessary, wait a little longer, and so varied is the material that several persons in

succession may without disadvantage work at it. The most important thing which Mr. Stevens has done in connection with this work is to redraw, in a form adapted for reproduction, the plans of the area excavated. This has required over a month of continuous work.

Mr. Darrow, holder of the Charles Eliot Norton Fellowship in Greek Studies (Harvard University), chose as the subject of his thesis the History of Corinth since its destruction in 146 B.C., a work much needed in view of the School's excavations there. It is hoped that he may some day expand this thesis into an exhaustive treatise. He has also given some time to travel.

Mr. McMahon has devoted himself to systematic study in the collections of sculpture and vases, and his thesis will discuss the development of portraiture in archaic Greek art.

The "associate members" have employed their time as follows :

Professor Battle, of the University of Texas, who reached Athens on November 2, in addition to familiarizing himself with the monuments and the contents of the museums, has travelled widely, going outside of Greece to Egypt, Palestine, Asia Minor, Sicily, and Italy.

Mr. Seager arrived early in January, and worked chiefly on the Mycenaean collections in Athens for two months before sailing for Crete to participate in Miss Boyd's excavations, as he did a year ago.

The short campaign of excavation this year at Corinth was begun on May 13 and continued until June 28. This late start was due to the delays incident to the expropriation of the land by the government. When the commission of expropriation visited Corinth on December 28, I designated to the official surveyor, at the request of Mr. Kabbadias, such parcels of ground as would be sufficient for several years of excavation, including, of course, the tract excavated a year ago, pending expropriation proceedings. The lots selected lie to the west and south of the Old Temple and the excavations of previous years, and, with

what is already controlled by the School, should comprehend enough to determine the limits of the Agora and allow of an investigation of its immediate surroundings, so far as this is possible without the more expensive condemnation and destruction of dwelling houses. The official survey gives the area of the properties designated as aggregating fifteen and a half stremmata (nearly four acres), belonging to thirteen owners. Of this tract there has already been excavated, in such part of last year's campaign as operations were prosecuted there and in this year's digging, over a third in area, and perhaps also in cubic meters, so far as one can form in advance an estimate of the depth of earth to be removed.

This is an encouraging outlook toward the attainment of the goal which the School has latterly set itself in its excavation work at Corinth. Encouraging, because the most important result of the digging this year was the finding of a Greek stoa, which it is absolutely certain is on the south side of the Agora, so that the limits of this on three sides — north, west, and south — are now known. I have prepared a fuller account of this discovery of much importance for the topography of Corinth. This with a brief mention of the more noteworthy single finds and a sketch plan of the excavations will be published in the body of the *Journal*, so I will not repeat this here. I may be permitted, however, to touch upon several other matters which concern the conduct of the excavations and future prospects.

Each year it becomes more difficult to find a dumping place for the immense quantity of earth from the excavations. It is necessary that it be situated at a lower level than the area being excavated in order that the loaded cars may run down by gravity and at not too great a distance for economy of haul. One by one the most available fields have been filled, and the owners of the others, seeing their opportunity, tend to demand an exorbitant sum for allowing what is really a benefit to their land. I should not be surprised if at any time it were necessary to suspend operations for a season or two, or else submit to this extortion. In the negotiations of this year only the

intervention of influential residents of New Corinth made it possible to obtain the lot desired.

For this season's work, as for that of a year ago, ten cars with sufficient track were rented from the Corinth Canal Co. through the courtesy of Mr. Karatheodores, its Director. The amount of earth removed in twenty-seven working days was some 10,500 loads, each of half a cubic meter. This number would in the same time have been 25 per cent larger had the School possessed an unlimited supply of cars, for the cramped dumping field caused frequent delays.

Messrs. Caskey and Hastings, both Fellows in the School, were with me at Corinth from beginning to end, and gave able assistance; other members of the School were present for shorter periods.

Mr. Caskey completed the inventory of inscriptions, with facsimiles, which was begun a year ago, and which, with the additions of this year, comprehends 383 numbers. He also made good progress toward bringing up to date from the beginning the collection of squeezes in order to conform with Rule XXIII. He further did considerable architectural draughting of illustrations for the forthcoming Bulletin.

Mr. Hastings was responsible for keeping up the inventory of sculpture (which now contains 728 entries) and had the immediate supervision of the work of excavation. He also made a careful plan of the trench where the more important finds were made.

I myself, besides having general oversight and direction of all that was being done, was chiefly busy in preparing my share of the text of the aforementioned Bulletin, and it is complete, save for the final revision.

The finishing of the original sheets of the survey of the excavation area, started by Mr. Hill and completed by myself, took considerable time last autumn and involved a brief visit to Corinth to settle some doubtful points. The redrawing of these plans by Mr. Stevens has been already mentioned. It has seemed best and least confusing to divide the material

between two sheets, one for the building remains of the Greek period, the other for Roman work and such Greek structures as survived into Roman times.

The total cost of the excavations of the year, exclusive of the land expropriated, was 12,307 drachmas, and the campaign was made possible, as in the two preceding years, by the generous gifts of Mr. Elliot C. Lee and Mr. J. Montgomery Sears, supplemented by the contributions of Miss Burta Brittan, Professor Allan Marquand, Mr. Richard B. Seager, and an anonymous donor.

Corinth and its excavations are visited more each year. In the twelve months May, 1903, to April, 1904, the number of names in the visitors' book in the museum was 812,—300 Greeks and 512 foreigners. The corresponding figures for the year previous were 315 and 356, so that there is a substantial increase, in spite of its having been regarded as a poor tourist season. And there is always a considerable number who pass through without registering. The excavations at Corinth are certainly increasing in general interest.

The new classification in the library has proved satisfactory, even beyond my expectations, enabling a reader to find much more quickly than before a desired volume, while it has also diminished the labor of the librarian. Useful additions to the library equipment have been a standard L. B. case for the card-catalogue of authors and a shelf-list, which is virtually a subject-catalogue.

The binding of the large portfolios of plates, begun a year ago, has been completed. This was necessary for the preservation of the plates, which through much, and not always careful, handling were showing signs of wear. Apart from considerations of this sort, their binding facilitates the rapid turning to a particular plate, an advantage abundantly worth the outlay.

The increase in the number of books during the past year to date has been 272, the accession book having reached the number 4323.

As heretofore, the Adelbert Hay Memorial Fund has been reserved for the purchase of the larger, more sumptuous books.

I append to this report a list of the donors to the library.

The routine work of the library has been well and faithfully performed by Mr. Caskey, who has also, under my direction, classified the numerous pamphlets belonging to the School, and has numbered, catalogued, and arranged the photographic plates from the excavations at Corinth, 447 in all. Prints have now been struck off from all the plates, and the whole series of photographs is made accessible for use.

The building and grounds of the School seem to be in excellent condition. The former has required no large outlay for repairs and none promise to be called for in the immediate future. Three students' rooms were renovated during the past summer, and since a year ago the windows and blinds have been thoroughly overhauled and the exterior woodwork painted. In the School grounds water pipes for irrigation have been laid in two directions, with the intention of utilizing the surplus of water at present available, and a beginning has been made of planting several varieties of evergreen shrubs in places where their presence will be particularly welcome. I shall continue to do this, since it entails but a slight expense annually, until the limit of irrigation has been reached.

Besides the completion of the endowment of the School for annual running expenses, its financial needs in other ways are equally imperative. To enable it to do the work expected of it as one of the national archaeological schools in Athens, it should be able every year to count on a certain sum for exploration and excavation. However welcome a larger amount would be, if \$1000 were annually available, it would go far toward removing the disadvantages incident on the present uncertainty of excavation funds, and would serve as a nucleus for the contributions of individuals. An excavation fund of \$20,000 or upwards is therefore earnestly to be desired.

Further, the Fellowship in Architecture should be put on a permanent basis. The presence in Athens each year of a man

with architectural training, as a member of the School, would be of great value in connection with certain sides of the School work, especially that of excavation. To the architect himself, too, there is much to be gained from an extended residence here, and it is certain that such a fellowship would be bound to exert an influence for the better on the spirit of American architecture. To make the architectural fellowship permanent, and attract candidates of the first rank, a fund of from \$15,000 to \$20,000 should be available.

Another requirement which will be each year increasingly felt is an addition to the School building, to house the rapidly growing library and to provide a room adequate for the public meetings of the School. The present accommodations are barely sufficient. The library could easily be doubled in size by an enlargement toward the east, while the new rooms below would be useful in various ways,—students' cloak room, draughting rooms, etc. An extension of this size can probably be built for \$5000.

In closing this report, I wish to make grateful acknowledgment of the help and wise counsel I received a year ago from my predecessor, Professor Richardson, in connection with my taking over the direction of the School. But for this aid, so generously rendered, I should have been unacquainted with much concerning the policy of the School and with many matters of administrative detail.

T. W. HEERMANCE, *Director.*

ATHENS,
July 18, 1904.

DONORS TO THE LIBRARY OF THE AMERICAN SCHOOL,
1903-04

D. Appleton & Co., 2 books.	Archaeological Society of Berlin, 1 pamphlet.
E. Capps, 1 pamphlet.	Trustees of the British Museum, 2 books.
S. Eitrem, 2 pamphlets.	British School at Athens, 1 book, 1 pamphlet.
W. H. Goodyear, 4 pamphlets.	British School at Athens, with Hellenic Society, 1 pamphlet.
P. D. Kalogeropoulos, 2 pamphlets.	Göteborgs Stadsbibliotek, 2 books.
P. Kastriotis, 1 pamphlet.	Greek Red Cross Society, 2 pamphlets.
P. M. Kerales, 1 pamphlet.	Numismatic Society of London (through H. A. Grueber), 20 volumes of <i>Numismatic Chronicle</i> .
A. D. Keramopoulos, 1 pamphlet.	Philological Society "Parnassos," 2 books.
A. Marquand, 2 volumes of plates.	Smithsonian Institution, 2 books.
P. Negrin, 1 pamphlet.	University of Upsala, 4 pamphlets.
R. B. Richardson, 150 pamphlets.	
O. A. Rhousopoulos, 1 pamphlet.	
Miss L. C. Spaulding, 1 book.	
T. Stickney, 11 books.	
C. Waldstein, 1 pamphlet.	
J. W. White, 7 books.	
A. Wilhelm, 1 pamphlet.	
Archaeological Society of Athens, 1 book, 1 pamphlet.	

American School
of Classical Studies
in Rome

NINTH ANNUAL REPORT OF THE MANAGING
COMMITTEE OF THE AMERICAN SCHOOL OF
CLASSICAL STUDIES IN ROME

To the Council of the Archaeological Institute of America:

GENTLEMEN, — I have the honor to submit the following Report.

The more detailed account of the conduct of the School during the current year will appear in the report of the Director. I shall therefore do no more here than refer in a general way to the subject-matter of his report. A few points, however, are of special interest. The first is that the School is slowly gaining in the direction of permanence of appointment. The extension of the term of office of the Director to five years, replacing the old and unsatisfactory method of annual appointment, was a necessary first step in this direction. The reappointment of Fellows was a second step in the same direction. It is well worth considering whether the time has not come to follow out the Director's suggestion that, in certain cases, a Fellow may be appointed for even a third year, and given some share in the instruction of the School. I feel sure this is a wise thing to do when our revenues are sufficient; but it is not quite clear at present that we have the means to do so. It is also to be hoped that the time may soon come when we may be able to offer a longer tenure than one year, with the possible advantage of reappointment, to the future professors and lecturers in our School. The development of a fairly per-

manent staff of instruction and research is evidently our most important problem, in case the School is to produce a permanent, recognizable effect in Rome, and thus exercise an influence comparable to such an institution, for example, as the German Archaeological Institute. I know no point on which the testimony of intelligent observers in Rome is so emphatic as this: namely, that if the American School is to exercise its full function, it needs a permanent staff of professors and lecturers, secured by liberal endowments. At the present time, however, all we can hope to do is to move in this direction with slow steps, doing what our actual revenues warrant, and nothing more.

In February of this year Professor Rolfe, of the University of Pennsylvania, found that he would be unable to go to Rome next year as Professor of Latin, and reluctantly resigned his appointment. The Executive Committee, acting under the authority vested in it by the Fifth Regulation of the School, filled this vacancy by electing Professor Jesse Benedict Carter, of Princeton University, as Professor of Latin for the year 1904-05. Professor Carter has accepted the appointment.

I am happy to announce the reappointment of Mr. Herbert F. De Cou as Lecturer in Greek Archaeology, and of Dr. Arthur Mahler as Lecturer on Greek and Roman Sculpture, for the year 1904-05. The services of these gentlemen have been of exceptionally high value. It is a matter of great regret that our income is not such as to warrant furnishing their salaries from the funds of the School. The liberality of Mr. Allison Armour and of Mr. William A. Slater has made it possible for us to obtain them, and our special thanks are due to these gentlemen for this signal service.

The appeal made by the Archaeological Institute last year to the Carnegie Institution in Washington, in behalf of the scientific work of our Schools in Rome and Athens, was received in the most friendly spirit by President Gilman; but the Carnegie Institution voted no appropriations for archaeological purposes last year. It is to be hoped that the appeal

will be renewed and granted, in order that the School in Rome may be enabled to prosecute important scientific investigations and, perhaps, great explorations, which at the present time it is impossible to do, because our revenues must be used for the fundamental running expenses of the School. It is much to be desired that the scope of the School be extended, also, beyond the ancient period, not only because of the real value of the work to be done, but because of the larger interest that will be sure to gather about the School. The proposal of the Director to this effect seems to me in every way admirable, provided we can secure the means. It cannot be stated too plainly that, while the School in Rome is meeting all its obligations and doing its work efficiently, it has not the means to extend the scope of that work.

The endowment of the School remains at practically the same point as last year. In view of the general condition of business it was highly inexpedient to attempt any canvass for additional endowment this winter, but the finances of the School for the year are in satisfactory condition. Three years ago we had a deficit of nearly \$1400 in running expenses, and two years ago a deficit of \$300, both of which Mr. Allison Armour generously paid. Last year we came out with a very small balance to our credit; and it seems probable, according to the Treasurer's provisional estimate, that the current year will close, on September 1, 1904, with a balance to the good of from \$300 to \$400. It is also practically certain, in case the subscriptions from colleges, groups of alumni, and individual donors continue next year on the same basis as this year, that we shall be able to report a safe though small balance to our credit in September, 1905. While we are debtors to many institutions and friends, it is only just to say that this state of things would not have come about without the timely help given in many ways by Mr. Allison Armour and the substantial relief furnished by the four-year subscription of Mr. J. Pierpont Morgan.

As will be noticed in the report of the Director, the library of the School continues to be the recipient of various private gifts. The contributors this year are Messrs. Kidder, Bradley, McLennan, Whitehouse, Marquand, J. H. Schiff, George A. Armour, and Allison V. Armour. Official publications of the India Office have come to the School through the good offices of Mr. Choate, our Ambassador to Great Britain, and, as reported by the Director, similar gifts continue to come from the British Museum and from the Departments of Public Instruction of the French and German governments. The various tours taken by the students are noted in the report of the Director. For one of these Mr. Allison Armour placed his yacht at the disposal of the School, taking with him the Director and three of the students, to visit the classical sites of Crete, the southern coast of Asia Minor, and the Cyrenaica.

The volume of *Papers* to be published for the School by the Institute is well in hand, and may be expected in print during the course of the coming year.

Respectfully submitted,

ANDREW F. WEST, *Chairman*.

PRINCETON,
May 12, 1904.

REPORT OF THE DIRECTOR

1903-1904

To the Managing Committee of the American School of Classical Studies in Rome :

GENTLEMEN,—I have the honor to report as follows concerning the work done by the staff of instructors and the students of this School since the beginning of the present year. The term began as usual on October 15 and, after a few days, some twenty students were in attendance. The number has varied from time to time owing to the admission of persons who desired to attend a special course or to do special work. As a whole the student body has been of unusual excellence. There have been but two Fellows,—Mr. Van Buren, reappointed from last year, and Mr. De Witt, who came to the School from Chicago. Of the first, I need only recall to your attention what I said of him last year; the latter came better prepared for philological work than, perhaps, any other of the students of recent years. Both Fellows have already sent to the Chairman of the Committee on Fellowships reports of their work, which will serve the Managing Committee as direct evidence of their work and character. No Fellow was appointed to the Fellowship in Christian Archaeology. In regard to this Fellowship, it is greatly to be regretted that in those years when no one is appointed, some part at least of the money for the Fellowship is not provided for the purchase of books in this department. The library is extremely weak in this subject.

Of the students, six (Miss Bruce, Miss Ballou, Miss MacMahon, Mr. Van Buren, Mr. Cross, and Mr. Curtis) had been here before. That such a large proportion of the whole

number should be those who have returned for a second or third year's work, is a gratifying sign that the School is succeeding.

Early in the year the Committee on Publication was provided with the material for a volume of *Papers of the School*. I feel reasonably confident, and my confidence is shared by my associates, that by the end of the current year there will be material for another volume.

Mr. Van Buren has finished his work on the Cicero manuscript in the Vatican. Mr. Curtis has been at work and nearly finished an article on Roman arches. Miss Bruce and Messrs. Arnold and Cosenza have material on inscriptions to publish. Mr. Cross has a paper on a statue of Polycleitan type, and Miss Hill has some comments on Vitruvius.

The courses of instruction offered by the instructors have varied but little from previous years. Professor Egbert has had charge of the palaeography and epigraphy. Mr. De Cou has, besides his courses in archaeology, given one on Italic Dialects, and he also gave several lessons in Modern Greek to the students who were to accompany him to Greece. For a second time, Mr. Slater's generosity made it possible for us to enjoy Dr. Mahler's services. He gave one course in English on sculpture, and one in German on the Museums of Europe, — both courses giving satisfaction. My own work was the same as usual.

In my last report I mentioned the need of some sort of seminar-work to draw the students more closely together, and to give them practice in the art of production. We have started this, and while it is not yet a success, I believe we are on the way to develop something that will be helpful. When it came to the actual point of practising the scheme, it did not seem to me best that it should take the usual seminar form. Professor Egbert was already doing seminar-work, and the obvious danger was that if any more such work was organized, only those students who happened to have an active interest in the subject of discussion at any given meeting would come.

This was not my object. While I wanted, if possible, to have meetings that would produce the material for advanced work and give the students practice, I wanted even more to gather together as many of the students as possible with subjects of interest to all of them, or subjects that might lead them to cultivate new interests. With this in view, Professor Egbert gave a talk one evening on certain aspects of Latin literature. This was followed by a discussion. Another evening Mr. Curtis and I spoke of Roman remains in Africa and the possibilities of work there. On other evenings there were discussions of inscriptions and bits of sculpture. In general these sessions were a kind of "open meeting," and although, as I said before, not exactly what was first intended, have shown, I believe, a good line for development. One great difficulty is the natural and suitable hesitation on the part of the students to speak; but this will be overcome with increase of second-year men and women.

Lectures by outsiders have been fairly numerous. Commendatore Boni spoke on the Forum and also invited us to see the opening of the corner-stone of the House of Domitian — we being the only outsiders invited; Signori Cannizzaro and Pasqui spoke on the Ara Pacis; Professor Woodberry, of Columbia, spoke of Rome and certain poets; Professor Allan Marquand, on curvature in architecture; Professor Slaughter, on the *Ludi Saeculares* inscription; Professor J. W. White, on the manuscripts of Aristophanes; and ex-President Low, of Columbia University, on the School in its relation to America.

It need hardly be said that the courtesies of the German Institute were extended to us, as usual, by Professors Petersen and Hülsen.

The library, fortunately, has continued to find friends to assist its growth. Through the good offices of His Excellency J. H. Choate, the India Office sent us some very valuable books, while the British Museum and the French and German Departments of Instruction continue to send publications. Other

gifts have come from Messrs. Kidder, Bradley, McLennan, Whitehouse (£100), Marquand, J. H. Schiff, George A. Armour (£50), and A. V. Armour, who, as always, has been on the watch to help us. The entire recataloguing of the library was finished last autumn by Mr. De Cou.

Besides the library, the museum has grown. Dr. Mahler gave it an interesting example of a forged vase; Signor Tavazzi gave some fifty Roman grave inscriptions of various dates, and I have added several small objects.

At present the work in Rome is closed. Mr. De Cou with about half the students is in Greece; Professor Egbert with others is touring about Naples in search of Oscan inscriptions. Three are with me, being taken by Mr. Armour to Crete and the south coast of Asia Minor. As usual we shall gather again at Pompeii for Professor Mau's lectures, which begin May 3.

Such has been the work and growth of the School. Two matters regarding the future remain to be considered. When Professor Marquand was in Rome, he spoke to me of his strong feeling that the time had come when the School could and ought to undertake work in Mediaeval and Renaissance studies. His belief, I know, is shared by many instructors and people of culture in America. My own feeling is perfectly well known to the Committee. At my request, Professor Marquand has addressed a letter to the Committee embodying his views; with this letter I entirely agree and would only insist that all students be required to have a reading knowledge of French, German, and Italian, a requirement which ought to apply to every regular student in the School. From the point of view of the Director, I may say that there is every reason to suppose the money to maintain this department can be drawn from sources which heretofore have not been approached, and that it will not detract from the Classical departments of the School, while the instruction can be provided by American or European scholars without encroaching on the time of the present staff. At least let us try. If those of us who believe in the scheme are wrong,

our error will become evident very soon and no harm will be done. If, on the other hand, we are right, the sooner we set to work, the better. The error lies in delaying the attempt to increase the benefits the School is rendering by a scheme which intelligent people on both sides of the Atlantic think practicable.

The other matter to consider is that of making the teaching staff more permanent. No other established School in Rome or Athens has such a method as ours, with the exception of our own School in Athens. Even granting our conditions, the system is not the best that can be imagined there, and in Rome, with the larger number of students and the far broader field of interests, its defects are more strongly manifest. With the making the term of the Director's office five years and the introduction of the plan of reappointing Fellows, two steps were taken in the right direction. It seems to me now that a Fellow of two years' standing might very well be kept in the School a third year as instructor, on a small salary. In this way the School would derive direct benefit from the Fellows, and they in turn would have practice as instructors that would be of great value to them on taking up their permanent duties in America. As a case in point, I would advise keeping Mr. Van Buren here next year as instructor in epigraphy and palaeography, thus giving the annual professor time for advanced work. Continuing on these lines, the post of Latin Professor ought to be held for more than one year. If the Committee could provide the salary, this would be done; but if this is impossible, it seems as though the institutions that provide the holders of this office might be shown that it is to their advantage for their men to stay in Rome two years, and in this way the holders of the post might overlap each other. It is not that an annual professor is not a good thing, but one who came for two years would be of far greater use to his own home institution, to the School, and to himself. A more permanent staff will, however, demand greater energy in collecting funds by the Committee.

But one thing remains to be said: it is that the continued progress of the School this year has been due in large measure to the untiring energy of Professor Egbert, and to the never failing help of Mr. De Cou and Miss Bruce.

Respectfully submitted,

RICHARD NORTON, *Director.*

ROME,
April 2, 1904.

American School
of Oriental Research
in Palestine

THIRD ANNUAL REPORT OF THE MANAGING
COMMITTEE OF THE AMERICAN SCHOOL
FOR ORIENTAL STUDY AND RESEARCH IN
PALESTINE

To the Council of the Archaeological Institute of America :

GENTLEMEN,—The Annual Meeting of the supporters of the School was held in New York, December 31, 1903. The experience of three years had shown that the Regulations, framed before the School was established, needed amendment in several particulars, and the affiliation of the School with those at Athens and in Rome in connection with the Archaeological Institute of America made other changes desirable. The Managing Committee, in accordance with the instructions of the meeting in December, 1902, presented a draft of revised Regulations which, after discussion and amendment, were adopted. The Regulations are printed elsewhere in this Supplement. The only change which seems to require mention in this place is the constitution of a large Managing Committee corresponding to those of the other Schools, consisting of one representative from each of the Universities, Colleges, and Seminaries which support the School; all individuals who contribute to it not less than \$100 a year; three members chosen by the Society of Biblical Literature and Exegesis; the President of the Archaeological Institute of America, and the Chairmen of the Managing Committees of the Schools at Athens and in Rome *ex officio*. The immediate administration of the School is intrusted to an Executive Committee of seven,

consisting of the President of the Institute *ex officio*, five members chosen for one year by the Managing Committee at its annual meeting, and the Director of the School in the year next following his term of service.

The Director of the School in the year 1903-04 was Professor Lewis B. Paton, of Hartford Theological Seminary, whose report is submitted herewith. In consequence of the prevalence of cholera and the imposition of quarantines, some intending students were deterred from attempting to reach Jerusalem, and the only one present during the year was the Thayer Fellow, Dr. Hans H. Spoer, who was in his second year of residence. The death of Mrs. Paton by accident while on a journey east of the Jordan made it necessary to close the School a little earlier than usual. Professor Paton has the deep sympathy of the members of the Committee, as of all the friends of the School, in his bereavement.

The Director for 1904-05 is Professor Nathaniel Schmidt, of Cornell University. The Thayer Fellowship is held by Mr. Albert Ten Eyck Olmstead, recently a graduate student in the same University; and two other students, Mr. Benson B. Charles and Mr. Jesse E. Wrench, also from Cornell, are enrolled in the School. These gentlemen have been in Syria since the early summer and are now in Jerusalem, where Professor Schmidt is expected before the end of October.

The Managing Committee has again to express its grateful appreciation of the many services of Dr. Selah Merrill, American Consul in Jerusalem.

In the judgment of those who are most deeply interested in the success of the School, it is of vital moment that it should be in charge of a Resident Director who may give a continuity to its work impossible under the present system, and that it should establish itself permanent quarters more adequate to its needs than the rooms it has hitherto occupied in the Grand New Hotel. It is much to be desired, also, that it should have the means to make the beginnings of a museum, and to avail itself of the opportunities that offer to engage in exploration

or excavation. To achieve these ends a very considerable increase in the annual income of the School and in the funds that may be used for special purposes is necessary, and an effort will be made this winter to obtain additional subscriptions and gifts for excavation.

GEORGE F. MOORE, *Chairman.*

HARVARD UNIVERSITY,
October 13, 1904.

REPORT OF THE DIRECTOR

1903-1904

To the Managing Committee of the American School of Archaeology in Palestine :

GENTLEMEN, — Permit me to submit the following report of the work of the American School for Oriental Study and Research in Palestine during the academic year 1903-04.

Early in February of last year I was informed by your Committee that it wished me to go out as Director of the School of Archaeology in Jerusalem, and I at once applied to the Trustees of Hartford Theological Seminary for permission to accept. This they generously accorded, voting me a year's leave of absence on full salary. Through this liberality I was able to make a longer stay and to carry out more extended investigations than would otherwise have been possible. After consultation with Dr. Frederick Bliss, Dr. S. I. Curtiss, Dr. J. P. Peters, and others familiar with Palestine, I decided that it would be expedient to visit that country in the summer, and accordingly set sail for Naples with my wife and little daughter on May 25, 1903. At Naples I had the pleasure of meeting Dr. Barton on his way back from Jerusalem, where he had been Director of the School during the previous winter, and received from him much detailed information in regard to the duties and opportunities of my position. This proved of the greatest value, and enabled me to avoid many unpleasant experiences into which otherwise my ignorance must have brought me.

At Naples I learned that there was cholera in Egypt and quarantine against Egypt in Syria. I was obliged, therefore, to take the longer route by way of Constantinople. As I had a wait of nine days, it would have been possible to see some-

thing of Greece if I had been able to send our heavy luggage on by sea to meet us at the Piraeus; but the Compagnie des Messageries Maritimes would not take the luggage except as freight, and there was not time to clear freight at the Piraeus, so that we had to wait for the steamer in Naples. I tried to improve the time by studying the antiquities in the Museum at Naples and at Pompeii; and on introducing myself to the Director I was afforded every facility by him, although it was the season of the year when the Museum was closed for repairs.

On the outward voyage from Naples we stopped a day at Piraeus, long enough to get a glimpse of Athens. At Constantinople I was joined by my sister, Miss Julia B. Paton, Professor of Biology in the American College for Women at Constantinople, who spent the summer with us in the Lebanon and helped me greatly in studying the flora of that region. Dr. S. I. Curtiss, of Chicago, and Drs. Post and Dorman, of Beirut, were also fellow-passengers on the steamer from Constantinople to Beirut, and with their help I was able to lay out a plan for the summer, even before I landed in Syria.

We arrived in Beirut on June 21, and received a cordial welcome from the American Consul, the Hon. G. Bie Ravndal, and from the professors in the American College, several of whom were already known to us personally. On the advice of the old residents we decided to make our summer headquarters at 'Aleih in the Lebanon. This place has the advantage of being 3200 feet above the sea and of being cool even in the hottest weather. On our shady veranda the temperature never went above 72° at any time in the summer. There is also a good hotel there managed by the proprietors of Bassoul's Hotel in Beirut. Most of the professors in the College at Beirut have summer residences either in 'Aleih or in the neighboring villages, so that we had the privileges of their society and their experience, and were able to call in the members of the Medical Faculty in case of illness. 'Aleih lies on the railway between Beirut and Damascus, and is an excellent centre from which

to make trips to all parts of the Lebanon. Dragomans, horses, and carriages can be procured there as easily as in Beirut. Mr. Ravndal, the American Consul at Beirut, resided in 'Aleih last summer. He showed himself a kind friend, and did everything in his power to render our summer pleasant and profitable. Dr. Post put his botanical knowledge and his herbarium at our disposal. Dr. Porter took frequent trips to Beirut with me to explain the objects in the Museum of the American College and to show me his valuable collection of coins. All the other professors and foreign residents helped us in every way in planning trips and in carrying them out. Without their knowledge of the language and the customs of the country I should have been able to get little out of my first summer in Syria. At 'Aleih there is also opportunity to secure good teachers of modern Arabic. This is no small advantage, and it is one that does not exist in other villages of the Lebanon.

Almost immediately after our arrival at Beirut the quarantine against Damascus that had been on all winter was removed. There was no telling how long it would stay off, so that it seemed best to visit Damascus at once. Accordingly I went there, and while there I was invited by Professor Stuart Crawford and Professor Samuel Ives Curtiss, whose recent death we mourn, to join them in a tour around the Sea of Galilee and back to Damascus. This was a rare opportunity. Professor Crawford was born in Damascus and speaks Arabic like a native, and Professor Curtiss had an intimate knowledge of the country and of its customs from repeated summer tours. I could have had no better introduction to travel in Syria, and I profited greatly from the courtesy of these two gentlemen. Our object was to visit the shrines in the region south of Damascus and to study the religious beliefs and customs that exist in these places. This took us off of the beaten paths of travel and brought us a great deal of curious information. We kept copious notes of all that we saw and heard, took a large number of photographs, and copied several Greek inscriptions which we believe not to have been published hitherto.

This trip occupied something over three weeks, and was crowded full of the hardest kind of work.

On my return to Damascus Mrs. Paton joined me, and we spent some time at Baalbek studying the results of the recent German excavations. From Baalbek I went to visit my old classmate, Rev. William Jessup, at Zahleh, and while there a quarantine of ten days was suddenly imposed by the Lebanon against Damascus. Our friends managed, however, to get us out of the district by a back road through the mountains before the *cordon* of soldiers was stationed, so that we escaped the hardships that many were obliged to suffer who passed through quarantine. The Rev. Mr. Doolittle, of Zahleh, then took us with him on a missionary tour through the southern Lebanon, on which we had a fine opportunity to see what American education is doing for the country, and to study the manners of the Druses.

In August Mrs. Paton and I made a three weeks' tour from 'Aleih to the Cedars of Lebanon. The easy route by way of Tripoli was closed by cholera, and we were obliged to go overland along the backbone of the Lebanon. We planned our trip so as to visit nearly all of the ruined temples of the Lebanon, and I was able to get photographs and measurements of all that I visited, besides searching diligently for inscriptions. We spent several delightful days camping under the Cedars, and returned by way of the ruined temple at Lake Yemuneh and the east side of the Lebanon range.

Soon after my return to 'Aleih I was invited by the Rev. W. K. Eddy, of Sidon, to make him a visit, and spent several most profitable days in seeing Sidon and the neighboring places under his experienced guidance.

Those portions of the summer that were not spent in travel were devoted to the study of modern Arabic with a teacher at 'Aleih. Even on the trips I was able to keep up a little study and to put into practice what I had learned in the intervening periods. As a result of the summer study I went to Jerusalem not quite so helpless linguistically as I should have been if I

had gone there directly from America. On the whole I felt that it was well worth while to have spent the summer in Syria. The heat was never excessive, except in the Jordan Valley in July and at Sidon in August, and even this was not greater than I have felt in New York. We travelled freely on horseback even in the middle of the day, and neither my wife nor myself experienced the slightest inconvenience. All of us, including the child, were perfectly well during the entire summer. I should have no hesitation in going to Syria again in the summer time, and I see no reason why all the directors and students of the School of Archaeology should not do so if they wish. I experienced everywhere the greatest kindness from the Beirut professors, the American, Scotch, and English missionaries, the native teachers, and the people generally.

Dr. Spoer, the Fellow of the School during the past year, was a student in the School the year before, and consequently spent the summer also in Syria. We made repeated efforts to meet one another, but cholera and cordons always intervened, so that we could not make connection, although he was in the Lebanon most of the summer. He was caught by the quarantine that I succeeded in evading, and had ten most uncomfortable days in a native hut at Mrejat on the top of the Lebanon. He succeeded in visiting Baalbek, where he was fortunate enough to meet the German excavators and to have the ruins explained by them. He also made a study of the ruined temple at Beit Meri, the results of which he has embodied in a paper that is now in the hands of the Managing Committee. He had also the privilege, before the School opened, of taking an archaeological trip east of the Jordan with Dr. Euting, of Strassburg, from whom he received many valuable hints as to archaeological methods and learned the best ways of making squeezes, casts, and impressions.

The latter part of September we removed from 'Aleih to Jerusalem, and prepared for the work of the winter. Several students had had correspondence with me and had expected to attend the School, but the persistence of cholera and the serious

disturbances in Beirut frightened them all, so that they came no farther than Germany; accordingly, I was left with Dr. Spoer, the Fellow of the School, as my sole pupil. Several requests were received from residents of Jerusalem and others to be admitted to the School as special students, but I did not deem it wise to receive them, as this would have involved a lowering of the standard of work.

In view of the fact that the School was so small, it seemed best to continue the arrangement made by my predecessors and hire again the room rented for a schoolroom in the Grand New Hotel. This had the advantage of enabling us to live at this hotel, of being near to the library, of enjoying the friendship of Dr. and Mrs. Merrill, and of keeping an oversight over the belongings of the School.

During the entire winter, except when we were absent on tours, I lectured once a day on 'The Historical Archaeology of Palestine.' Dr. Spoer also did some work with me in Assyrian. The privileges of the German School of Archaeology were kindly extended to us by Dr. Dalman, the Director. Dr. Spoer took courses in 'Modern Arabic' and in 'Manners and Customs of Modern Palestine' with Professor Dalman, and in 'History of Israel' and 'Geography of Palestine' with Professor Löhr. I had the pleasure of attending Dr. Dalman's lectures on 'Manners and Customs of Modern Palestine' and on 'Topography of Jerusalem.' The Dominicans of Saint Étienne invited us to all of their public lectures, and we heard Père Séjourné on 'The So-called Pilgrimage of Saint Sylvia,' Père Lagrange on 'Zoroaster and Judaism,' Germer-Durand on 'The Walls of Jerusalem in the Christian Era,' Savignac on 'The Land of Edom,' and other lecturers on other subjects connected with the archaeology and the history of Palestine. We also kept up the study of modern Arabic with private teachers.

In addition to the regular work of the School, Dr. Spoer carried on independent researches concerning the folk-lore and superstitions of Palestine. Some of his results he has embodied in a paper on 'Jewish Amulets,' which will appear in the next

number of the *Journal of Biblical Literature*. He also made a study of wedding customs, which he has embodied in a commentary on the Song of Songs, and prepared a paper on the significance of menhirs, dolmens, and cup-marks. During the two years of his residence in Jerusalem he has acquired knowledge of the Palestinian dialect of Arabic, and has written a brief grammar of the dialect that will be of value to future students in the School.

My own study was devoted chiefly to the topography of ancient Jerusalem. I investigated all the archaeological remains that were accessible, and obtained a large collection of excellent photographs. The results of my investigations I hope soon to publish in a volume or a series of articles. I was interested also in studying village life and observing the religious beliefs and customs of the country. Some studies on these subjects I hope soon to have ready for publication. During the visit of the party from the University of Chicago in Jerusalem, I gave some lectures on the topography of ancient Jerusalem, and I addressed the World's Sunday School Convention on 'Jerusalem in Old Testament Times.' At the request of the Trustees of Hartford Theological Seminary I took advantage of my residence in Jerusalem and my trips to other parts of the country to make a quite complete collection of objects illustrating the life of the Bedawins and of the Fellahin. This collection is now on exhibition in the Museum of Hartford Theological Seminary, where it is open to the inspection of the public.

Thanks to the labors of my predecessors, I found an excellent working library in possession of the School. This I endeavored to augment by judicious purchase as favorable opportunities presented themselves. I added eighty-one volumes in all, forty-eight by purchase and thirty-three by gift. Among the former were several expensive works, such as Lane's Arabic Dictionary. I continued the subscriptions to the periodicals previously taken by the School and added the *Mitteilungen der Vorderasiatischen Gesellschaft*. I had forty-three

volumes bound, leaving no unbound volumes in the library. A complete list of the books added and books bound I have transmitted to the Managing Committee, and an account of my expenditures to the Treasurer.

An opportunity for exploration presented itself in Phoenicia and resulted in some interesting finds which will be described more fully elsewhere. In Jerusalem no opportunity for excavation presented itself until a short time before my departure. I then learned that property along the supposed line of Agrippa's wall was controlled by a broad-minded Moslem gentleman and by one of the European residents, from whom I could get permission to do some digging. I took advantage of this opportunity to search for buried portions of the wall and to examine supposed remains of it. The results of this study I hope to present later to the Archaeological Institute.

Last winter was peculiarly favorable for archaeological excursions. Cholera, which had been rampant during the previous winter, had migrated farther north, so that we were free to come and go as we pleased. The rainfall was slight, so that even in January and February we could take short trips without difficulty. We visited the *tells* of the Shefela, Beit Jibrin, Tell el-Hesy, Gaza, Beersheba, and Hebron on a circular tour from Jerusalem. We saw the sites in the neighborhood of Ramallah under the guidance of Mr. Grant of the Friends' Mission at Ramallah. We spent several days at Gezer on invitation of Mr. Macalister, the Director of the excavations of the Palestine Exploration Fund; and we also had the privilege of his explanations when we visited the collection from Gezer in the Turkish School at Jerusalem. During one visit to Gezer we were hospitably entertained by Mr. Murad, the administrator of the Bergheim estate at Abu Shusheh. We also made short trips to Jericho and the Dead Sea, Mar Saba, and Wady Farah. Our winter vacation we timed to coincide with that of the German School, and during this interval I was able to make a two weeks' visit to Egypt. Dr. Spoer improved this time by taking a trip to Galilee with Dr. Benzinger, on which

he was able to inspect the German excavations at Mutesellim and Ta'anak.

Late in the spring, just before the end of the School year, we planned a tour in company of Dr. Masterman of Jerusalem, to make a more thorough study of 'Araq el-Amir, then to visit Amman, Jerash, Pella, the Decapolis, and to return by way of Beisan and Nablus. We had gone as far as Amman, and were just starting on the road to Jerash. It was a cool, cloudy morning, and we were riding slowly over a level, grassy spot, when suddenly, without any warning, and without uttering a cry, Mrs. Paton fell from her horse. Her head struck on a sharp stone, and she never regained consciousness. We were able to move her to the Amman station on the new pilgrimage railway from Damascus to Mecca, and to take her in a train to Damascus. She died on the train within two hours of Damascus, and I was obliged to bury her body in Damascus. She was the constant companion of my study and of my travels, and whatever success may have attended the work of the School during the past winter is due to her enthusiasm and brave willingness to put up with the inconveniences of life in Palestine.

Dr. Masterman and his sister-in-law, Miss Zeller, did everything possible to help me at the time of this tragedy, and Dr. Mackinnon of the Scotch hospital at Damascus took me into his family and showed himself a friend in need. President Bliss and all the professors in Beirut were kindness itself, and Consul Ravndal insisted on accompanying me as far as Jaffa when I returned to Jerusalem. I returned as soon as it was possible, and continued the work of the School until the 1st of May. Then I set sail for America. Dr. Spoer kindly volunteered to accompany me all the way, and certain lectures that I was unable to give him in Jerusalem in consequence of my wife's death I gave him on the homeward journey.

My personal thanks, as well as the thanks of the School, are due to Dr. Selah Merrill, United States Consul at Jerusalem, for constant help cheerfully given throughout the winter. His

great knowledge of the country and of the archaeology of Jerusalem were always put at our service, and he was always ready to help us in making and in carrying out plans. Mr. Gellat, the Dragoman of the Consulate, also rendered constant and invaluable aid. Hearty thanks are due to Dr. Masterman, Surgeon of the British Hospital, for large help and many acts of kindness; to Dr. Dalman of the German School of Archaeology, for opening all the privileges of the School and of the Museum to us, and for inviting us to join him in his excursions; to Mr. Macalister and the officers of the Palestine Exploration Fund, for allowing us so freely to inspect their excavations; to Mr. Dickson, H. B. M. Consul, Dr. Blythe, the Anglican Bishop, and all the English missionaries and residents, for many acts of hospitality and help; to the Brothers of Saint Étienne, the Greek Patriarch, and the Syrian Patriarch, for the use of books in their libraries; to Professor Guthe for the explanation of his investigations on the East Hill; to Dr. Benzinger for much friendly advice and assistance; and to Dr. Wilson of Safed, Dr. Torrance of Tiberias, and Dr. Paterson of Hebron, for their hospitality and help in carrying out tours. The kindness of Professor G. A. Smith of Glasgow and of Professor W. A. Brown of New York during the last month in Jerusalem I can never forget.

It remains only to speak of the plans that should be made for the future of the School.

1. If the School is to remain in Jerusalem, a suitable house is imperative. The present quarters in the Grand New Hotel are inadequate, while they cost as much as a whole house. Unless we can have a building similar to that occupied by the German School, where there are suitable accommodations for Director, students, and classes, as well as for public lectures, our School will never achieve the success that it deserves to have.

2. A permanent Director is greatly to be desired. The annual Director is just about ready to begin teaching when he is compelled to leave, and the best results cannot be secured on this system.

3. A regular attendance of students cannot be obtained without the establishing of a number of fellowships for study in Palestine. The distance is so great, and the expense of life in Jerusalem is so large, that few students will undertake this journey unless there is special inducement. It would be admirable if one travelling fellowship could be established by each of the institutions that now contributes to the support of the School.

LEWIS BAYLES PATON.

HARTFORD THEOLOGICAL SEMINARY,
October 12, 1904.

Archaeological
Institute
of America

REPORT OF THE FELLOW IN AMERICAN
ARCHAEOLOGY

*To the Standing Committee on American Archaeology of the
Archaeological Institute of America :*

GENTLEMEN, — As holder of the American Fellowship of the Archaeological Institute of America, I have the honor to present to you a report of the work done during the first half of the third year of the Fellowship, together with a brief review of some of the points covered in my general report, now in your hands, and including the results of the first two years and the first half of the third year of the work under the Fellowship.

I left Boston on December 29, 1903, and returned on May 8 of the present year. My season of field work was divided, as in the previous year, between two localities, Chiapas and Yucatan. I went to the former place first, and took up my residence among the same families of Lacandones as on the previous visit. Owing to their continued friendliness, I was able to take up the work where I had left it with no loss of time. I continued my residence among them until the first of April. A part of this time was taken up in visiting the settlements of the Lacandones in the surrounding country. I made a trip to the west as far as Ocosingo, where a general survey of the ruins in that locality was made.

The remainder of the field work was carried on in Yucatan, with the same interpreter of the two previous years. The chants collected among the Lacandones were worked over, and special attention was paid to the survivals of the early religion and the customs in connection with it now in existence in Yucatan.

With a knowledge of this side of the life of the Lacandonese an interesting comparison can be made.

In Yucatan and Chiapas there is an unusual opportunity to study, side by side, a people, one part of whom has never felt any outside influence strong enough to produce any appreciable effect on the language, customs, or religious life, while the other section has felt the full influence of a close contact with Spanish civilization since the days of the Conquest.

The Maya language, as spoken in Yucatan, stands out as one of the surprising evidences of the force of perpetuation of a native language in contact for centuries with a Latin tongue. The language of the Lacandonese of Chiapas and the region of the Usumacinta River shows few points of difference from that spoken on the peninsula.

In religion we find in both localities many survivals of ancient culture and worship. In Yucatan the former religious ideas are often concealed at first under the influences which came in at the time of the Conquest. Many native ceremonies still exist, however, and they seem to be relieved from possessing any heretical character, from the standpoint of the Catholic priests, by having the symbol of the cross interwoven in their structure, together with the names of many of the saints of the Church. A worship of the gods of the fields, the harvest, and the chase is still carried on throughout many parts of Yucatan. Ceremonies for rain are held with all the accompanying native beliefs in regard to the efficacy of divinatory rites. Offerings of food and drink are made to the spirits which inhabit the seven heavens stretching above the earth.

If many survivals of the former beliefs still remain among the Mayas of Yucatan, it may rightfully be expected that among the Lacandonese, than whom no people in Mexico and Central America have been more free from outside influence, we should find a still larger number of survivals of early forms of religious rites and beliefs. This is, in fact, the case.

The incense-burners of the Lacandonese are renewed each year with an elaborate ritual, many acts of which are definitely men-

tioned by the early authorities as taking place among the Mayas at the time of the Conquest. The new ollas are made in a secluded shelter. New fire is kindled with which to light the incense, which, in its very form, is probably a survival. Drunkenness is compulsory in the religious rites, and is caused by drinking large quantities of the ceremonial drink after it has been offered to the gods. The ears are often pierced with a stone knife, and the blood is used to anoint the stone idols still used by the Lacandones. The first fruits of the fields must be offered to the gods before they can be used. In the names of the gods of the Lacandones there are many survivals of terms given by the early Spanish historians and missionaries as the names of the gods of the Mayas. In many cases the attributes given to the gods have survived as well.

It is my intention to return to Yucatan and Chiapas in December, and carry on the work of the final year of the Fellowship. I shall devote the greater part of my time to the country of the Lacandones, since that field, I feel confident, is the most fruitful for further investigation.

The strongest hopes of arriving at a solution of many of the problems regarding the early Maya culture seem to be based upon an intimate and personal knowledge of the rites and ceremonies of the Mayas and, more especially, of the Lacandones, together with their modes of thought and their fundamental conceptions of life.

Respectfully submitted,

ALFRED M. TOZZER.

CAMBRIDGE,
October 14, 1904.

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III. The government of the Institute shall be vested in a Council, consisting of the following *ex officio* members: the President, the Honorary Presidents, the Vice-Presidents, the Treasurer, and the Secretary of the Institute, and the Editor-in-Chief and the Business Manager of its Journal; the Presidents of the Affiliated Societies; and the Chairmen of the Managing Committees of the Schools of Classical Studies at Athens and in Rome, and of the School in Palestine; and of additional members annually chosen by the members of the Affiliated Societies as follows:

Any local archaeological society, consisting of not less than twenty-five members of the Institute, may, by vote of the Council, be affiliated with the Institute, and shall then have the right to elect one member to the Council. When the members of such society shall exceed fifty, they shall have the right to elect a second member to the Council, and similarly another member for each additional fifty.

IV. The officers of the Institute and of the Council shall be a President, Honorary Presidents, five Vice-Presidents, a Treasurer, a Secretary, an Associate Secretary, and a Recorder. The President and Vice-Presidents shall be elected at the annual meeting of the Council, and shall be eligible for reelection. The Honorary Presi-

dents shall be the former Presidents of the Institute. The Treasurer, the Secretary, the Associate Secretary, and the Recorder shall be chosen by the Council, and shall hold office at its pleasure.

V. There shall be an Executive Committee consisting of the President, Secretary, and Treasurer of the Institute, *ex officio*, of the Chairmen of the Managing Committees of the Schools in Athens, Rome, and Palestine, *ex officio*, and of three members of the Council, each to serve for the period of three years, one to retire annually.

VI. The President, in behalf of the Council, shall present a Report on the affairs of the Institute annually to its members.

VII. The Secretary, with the aid of the Associate Secretary, shall perform such duties as pertain to this office.

The Recorder shall keep a record of the transactions of the Council.

The Treasurer shall collect, receive, and keep account of all assessments, subscriptions, and gifts of money to the Institute, shall pay its dues, and shall present to the Council at its annual meeting a written statement of accounts.

VIII. The accounts of the Institute shall be submitted annually by the Treasurer to two Auditors, to be appointed by the President, who shall attest by their signatures the correctness of said accounts, and report the same at the annual meeting.

IX. The Council shall hold an annual meeting on the second Saturday of May, at 10 o'clock A.M., at such place as may be selected by its members at the previous annual meeting. Any member of the Council unable to be present at any meeting may appoint by writing any other member to act as his proxy. One-third of all the members of the Council, present in person or by proxy, shall form a quorum.

Special meetings of the Council may be called by the Secretary, upon direction of the President, or at the written request of one-third of its members.

X. The Institute shall meet annually, as a whole, for the reading and discussion of scientific papers by its members. The time and place of this meeting shall be determined by the Council at its annual meeting.

General meetings of the Institute may be called from time to time, at the discretion of the Council.

XI. The Council shall have full power to determine the work to be undertaken by the Institute, and the mode of its accomplishment; to employ agents, and to expend all the available funds of the Institute for the purpose for which it is formed; but it shall not have the power to incur any debt on behalf of the Institute. It shall

have no other jurisdiction over the regulations or actions of the Affiliated Societies than that these Societies shall not undertake any formal publication without its consent; and any moneys contributed for any object promoted by an Affiliated Society, approved by the Council, shall be strictly appropriated to that object.

XII. Any collection of antiquities which may come into the possession of the Institute through the explorations undertaken by it, or otherwise, may be sold, at the discretion of the Council, to the museum or other public institution in the United States which may offer for them the largest sum; it being understood that contributions toward the cost of any exploration may be assigned by the donors to the credit of any museum or public institution as part of the purchase money.

XIII. The names of all Affiliated Societies and Members shall be printed with the Annual Report of the Council. Names of Life Members deceased shall be printed in the regular list, but these names shall be starred.

XIV. Each Affiliated Society shall be designated by its local name in the following style:

ARCHAEOLOGICAL INSTITUTE OF AMERICA

BALTIMORE SOCIETY

And it shall have the right to use the seal of the Institute on its official papers.

XV. Assessments, subscriptions, and donations may be paid to the Treasurer of the Institute or to the Treasurer of the Affiliated Society to which the contributing member belongs. Annual Members who have failed to pay their dues for two consecutive years shall, unless special action be taken by the Affiliated Society to the contrary, be dropped from the list of the Institute. The year shall be considered as closing on the 31st of August, and from this time the assessments of the year then ensuing shall become due.

XVI. Ten per cent of all annual dues received by each Affiliated Society shall be held by its Treasurer for the discharge of local expenses. In case any Society does not in any year require the whole of this sum, the balance shall, at the end of the year, be passed into the general funds of the Institute. Grants in aid of Affiliated Societies may be made by the Council.

XVII. Each member of the Institute shall receive a copy of all regular publications of the Institute issued during the period of his membership.

XVIII. The Institute commits to the Managing Committee of the American School of Classical Studies at Athens, and to the Managing Committee of the American School of Classical Studies in Rome, respectively, the entire administration of these Schools, including the expenditure of their incomes, under the following provisions:

1. The Chairman of the Managing Committee of each School shall make a report to the Council annually on the work of the School during the preceding year.

2. The President of the Institute shall be *ex officio* a member of the Managing and Executive Committees of each School, and the Chairman of the Managing Committee of each School shall be *ex officio* a member of the Council of the Institute.

3. A copy of all ordinary publications of the Schools shall be sent to each member of the Institute, and the Institute shall bear a proportionate share of the expense of publication of the Papers and Reports of the Schools.

4. The Institute shall maintain in each of the Schools a fellowship, to be administered by the Managing Committee, of the annual value of six hundred dollars, for the encouragement of archaeological studies.

XIX. Amendments to these regulations may be proposed by any three members at any annual meeting, and shall require for adoption the affirmative vote of three-fourths of the members of the Council present and voting.

RULES OF THE AFFILIATED SOCIETIES

RULES OF THE BOSTON SOCIETY

ADOPTED MAY, 1885. AMENDED NOVEMBER, 1897.

1. THE BOSTON SOCIETY OF ARCHAEOLOGY, organized under the regulations of the Archaeological Institute of America, is formed of members of the Institute resident in New England not belonging to any other society affiliated with the Institute, and of such members outside of New England as may elect to be enrolled in it.

2. The officers of the Society shall be a President, a Vice-President, a Secretary, a Treasurer, and an Executive Committee of eleven members, consisting of the officers already named and seven other members. The officers and the elected members of the Executive Committee shall be chosen annually to serve one year or until the election of their successors; but the Executive Committee shall have power to fill all vacancies which occur during its term of service.

3. The entire government of the Society, including the election of members, is vested in the Executive Committee; but this Committee shall have no power to involve the Society in any expense not covered by its share of the funds of the Institute, and may not levy any tax upon the members in addition to their annual subscription.

4. The annual meeting of the Society shall be held in Boston on the first Saturday of November, at 11 o'clock, A.M., when the Executive Committee shall report upon the work of the Society and of the Institute during the preceding year. Special meetings may be called at any time by the President, by three members of the Executive Committee, or by any ten members of the Society.

5. These rules may be changed only at an annual meeting.

RULES OF THE NEW YORK SOCIETY

ADOPTED FEBRUARY 19, 1885.

1. THE NEW YORK SOCIETY is organized under the regulations of the Archaeological Institute of America, for the purpose of carrying out more fully the objects for which the Institute is established.

2. The New York Society shall include those members of the Institute who are residents in the cities of New York and Brooklyn, and such other members as may elect to belong to it. Candidates for membership may be proposed by any member of the Society. The Society shall have no power to levy assessments upon its members in addition to their annual subscription.

3. The officers of the Society shall be a President, a number of Vice-Presidents, a Secretary, a Treasurer, and a Committee on Membership. This Committee shall have final power, and shall consist of six members, and of the President and Secretary of the Society *ex officio*.

4. An annual meeting shall be held on the first Saturday of November in each year, for the election of officers and of delegates to the Council of the Institute, and for the transaction of business. All officers shall be chosen by ballot, to serve one year or until their successors are chosen. But no member of the Committee on Membership, unless *ex officio*, shall serve for more than two consecutive years.

5. Special meetings for special purposes shall be called from time to time, at the discretion of the President.

6. The President and Treasurer shall have authority to use for the current expenses of the Society the money set apart for that purpose under the regulations of the Institute, and the Treasurer shall make an annual report to the Society of such expenditures. They shall have no power to involve the Society in debt.

7. These rules shall not be altered or amended except at an annual meeting, or at a special meeting called by the President for the purpose of considering such change; and notice of the proposed change shall be sent to the members two weeks before the meeting.

RULES OF THE BALTIMORE SOCIETY

ADOPTED FEBRUARY 22, 1888.

1. THE BALTIMORE SOCIETY of the Archaeological Institute of America is organized under the Regulations of the Institute adopted October 11, 1884; and is intended to include those members of the Institute resident in Baltimore, and such other members as may choose to belong to it.

2. The officers of the Society shall consist of a President, four Vice-Presidents, a Secretary, and a Treasurer; which officers shall

also, *ex officio*, constitute an Executive Committee. These officers shall serve for one year, or until the election of their successors.

3. The entire government of the Society is vested in the Executive Committee, which shall be, also, a Committee on Membership, having full power to elect new members, and having the function to use diligent effort to extend the interest in the work of the Society, and to increase its membership.

4. The officers shall not have power to incur for the Society any expense not covered by its share of the funds of the Institute, or to assess the members more than the annual dues of \$10.

5. An annual meeting of the Society shall be held in Baltimore, about the first of November, for the election of officers and of delegates to the Council of the Institute, and for any other business. Special meetings of the Society may be called at any time by the President. The quorum of the Society shall be constituted by seven members present.

6. These rules shall not be changed except at an annual meeting, or at a special meeting called by the President for the purpose of considering such a change; and notice of the proposed change shall be sent to members three weeks before the meeting.

RULES OF THE PENNSYLVANIA SOCIETY

1. The name of the Society shall be The Pennsylvania Society of the Archaeological Institute of America.

2. The officers of the Society shall be a President, two Vice-Presidents, a Secretary, and a Treasurer.

3. There shall be an Executive Committee and a standing Committee on Membership.

4. The annual dues shall be ten dollars. The payment of one hundred dollars at any one time shall constitute the person so paying a life member.

5. The annual meeting of the Society shall be held on the first Friday of November. Invitations may be extended to others than members to be present at the annual meetings.

6. At this meeting the officers for the ensuing year shall be elected; standing and special Committees shall be appointed; and the work of the Society for the ensuing year shall be determined.

7. Special meetings may be called at any time by the President, or upon the request of three members of the Society.

RULES OF THE CHICAGO SOCIETY

ADOPTED NOVEMBER, 1889. AMENDED NOVEMBER, 1897.

1. THE CHICAGO SOCIETY of the Archaeological Institute of America is formed of such members of the Institute resident in Illinois as do not belong to any other Society affiliated with the Institute, and of such members outside of Illinois as may elect to be enrolled in it.

2. The entire government of the Society, including the election of members, is vested in an Executive Committee of eleven members, to be chosen annually to serve for one year, or until the election of their successors. The Committee is empowered to fill such vacancies as may occur through the demise or resignation of any of its members. Five members of the Executive Committee shall constitute a quorum.

3. The Executive Committee shall choose from its own number a President and two Vice-Presidents, and may appoint a Secretary and a Treasurer. It shall have no power to involve the Society in any expense not covered by its share of the funds of the Institute, and may not levy any tax upon the members in addition to their annual subscription.

4. The annual meeting of the Society shall be held in Chicago on the first Thursday of November at 8 o'clock P.M., when the Executive Committee shall report upon the work of the Society and of the Institute during the preceding year. Special meetings may be called at any time by the President, by three members of the Executive Committee, or by any ten members of the Society.

5. These rules may be changed at an annual meeting only, and notice of the proposed change shall be sent to members a fortnight before the meeting.

RULES OF THE DETROIT SOCIETY

ADOPTED NOVEMBER 28, 1889.

1. The name of the Society shall be The Archaeological Institute of America,—Detroit Society.

2. The members shall consist of residents of Detroit, or of any other city or town in the State of Michigan.

3. The officers shall consist of a President, two Vice-Presidents, a Secretary, and a Treasurer. There shall be an Executive Com-

mittee of five. The President and First Vice-President shall be *ex officio* members thereof.

4. The entire government of the Society, including the election of members, shall be vested in the Executive Committee, subject to the direction and control of the Society.

5. The annual meeting shall be held on the first Saturday in November of each year, for the election of officers and for the transaction of such business as may come before it. Ten members shall constitute a quorum.

6. All officers shall be chosen by ballot, to serve one year, or until their successors are chosen.

7. Special meetings may be called by the President.

8. The moneys of the Society shall be expended under the direction of the President and Treasurer, under the supervision and control of the Executive Committee.

9. The annual dues shall be \$10. Life members shall be exempt from the payment of all dues on the payment of \$100. The Society shall have no power to levy any assessment on members in addition to their annual dues, nor incur any indebtedness beyond the cash means of the Society.

RULES OF THE WISCONSIN SOCIETY

ADOPTED DECEMBER 6, 1889.

1. THE WISCONSIN SOCIETY of the Archaeological Institute of America is organized under the Regulations of the Institute adopted October 11, 1884, and is intended to include those members of the Institute resident in Wisconsin, and such other members as may choose to belong to it.

2. The officers of the Society shall consist of a President, four Vice-Presidents, and a Secretary and Treasurer; which officers shall also, *ex officio*, constitute an Executive Committee. These officers shall serve for one year, or until the election of their successors.

3. The entire government of the Society is vested in the Executive Committee, which shall be, also, a Committee on Membership, having full power to elect new members, and having the function to use diligent effort to extend the interest in the work of the Society, and to increase its membership.

4. The officers shall not have power to incur for the Society any expense not covered by its share of the funds of the Institute, or to assess the members more than the annual dues of \$10.

5. An annual meeting of the Society shall be held, at such place as is designated by the Executive Committee, on the first Saturday of November, for the election of officers and of delegates to the Council of the Institute, and for any other business. Special meetings of the Society may be called at any time by the President, or by any three members of the Executive Committee. The quorum of the Society shall be constituted by seven members present.

6. These rules shall not be changed except at an annual meeting, or at a special meeting called by the President or by any three members of the Executive Committee, for the purpose of considering such a change; and notice of the proposed change shall be sent to members three weeks before the meeting.

RULES OF THE CLEVELAND SOCIETY

ADOPTED MARCH 20, 1895. AMENDED DECEMBER 21, 1897.

1. The name of the Society shall be The Archaeological Institute of America, — Cleveland Society.

2. The membership shall consist of residents of Cleveland, and such other members of the Institute as may choose to belong to this Society.

3. The officers shall be a President, a Vice-President, and a Secretary and Treasurer. These officers shall be an Executive Committee.

4. The entire government of the Society, including the election of members, shall be vested in the Executive Committee, subject to the direction and control of the Society.

5. The annual meeting shall be held on the first Saturday in November of each year, for the election of officers and for the transaction of such business as may come before it. Seven members shall constitute a quorum.

6. All officers shall be chosen by ballot, to serve one year, or until their successors are chosen.

7. Special meetings may be called by the President or the Secretary or seven members of the Society.

8. The moneys of the Society shall be expended under the direction of the Executive Committee.

9. The annual dues shall be \$10. Life members shall be exempt from the payment of all dues on the payment of \$100. The Society shall have no power to levy any assessment on members in addition to their annual dues, or incur any indebtedness beyond the cash means of the Society.

10. These rules shall not be changed, except at an annual meeting, or at a special meeting, called as provided in Section 7, for the purpose of considering such a change, and notice of the proposed change shall be sent to members two weeks before the meeting.

RULES OF THE CONNECTICUT SOCIETY

ADOPTED MAY 4, 1898.

1. The name of the Society shall be The Archaeological Institute of America, — Connecticut Society. The membership shall consist of residents of Connecticut, and such other members of the Institute as may choose to belong to this Society.

2. The officers shall be a President, two Vice-Presidents, a Secretary and Treasurer, and an Executive Committee of nine members, consisting of the officers already named and five other members. The officers shall be chosen annually, to serve one year or until their successors are chosen. The Executive Committee is empowered to fill vacancies.

3. The entire government of the Society, including the election of members, is vested in the Executive Committee; but this Committee shall have no power to involve the Society in any expense not covered by its share of the funds of the Institute, and may not levy any tax upon its members in addition to their annual subscription.

4. The annual meeting of the Society shall be held in New Haven on the first Friday of November at 8 o'clock P.M., for the election of officers and of delegates to the Council of the Institute, and for the transaction of other business. Special meetings may be called at any time by the President or by ten members of the Society.

5. These rules shall not be changed except at an annual meeting or at a special meeting called for the purpose of considering such change; and notice of the proposed change shall be sent to the members two weeks before the meeting.

RULES OF THE MISSOURI SOCIETY

1. The name of the Society shall be The Missouri Society of the Archaeological Institute of America.

2. The officers of the Society shall be a President, two Vice-Presidents, a Secretary, and a Treasurer. All officers shall be chosen by ballot, to serve one year, or until their successors are chosen.

3. There shall be an Executive Committee consisting of the officers mentioned in section 2. It shall be the duty of this Committee to promote the interests of the Society in every way, and to that end it shall have power to elect members.

4. The annual dues shall be \$10. Life members are those who have contributed at any one time as much as \$100 to the Society.

5. The annual meeting of the Society shall be held at such time and place as may be determined by the Executive Committee, for the election of officers and of a delegate to the Council of the Institute, and for the transaction of other business.

6. The Executive Committee shall have no power to involve the Society in any expense not covered by its share of the funds of the Institute, and may not levy any tax upon the members in addition to their annual subscriptions.

7. At each annual meeting the Executive Committee shall, through the Secretary, make a report of the work of the preceding year.

8. These rules may be changed at an annual meeting only; and notice of the proposed change shall be sent in writing to the members, at least a fortnight before the meeting.

RULES OF THE WASHINGTON SOCIETY

1. THE WASHINGTON SOCIETY of the Archaeological Institute of America is formed of residents of Washington, D.C., and such other persons as may choose to belong to it.

2. The officers of the Society shall consist of a President, four Vice-Presidents, a Secretary, and a Treasurer. These and four members of the Executive Committee shall be chosen by ballot, to serve one year and until their successors are elected.

3. The foregoing persons shall constitute an Executive Committee, which shall, subject to the control of the Society, be vested with the government of the Society, including the election of members, filling vacancies on the Committee, and the expenditures of the Society.

4. The annual dues shall be \$10. The payment of \$100 shall constitute a life member, exempt from all dues. The Society shall have no power to levy any assessment in addition to the annual dues, or incur any indebtedness beyond the cash means of the Society.

5. The annual meeting, for the election of officers and the transaction of other business, shall be held in November of each year, upon the call of the President; and special meetings may be called by the President or by seven members. A quorum of the Society shall consist of seven members.

RULES OF THE IOWA SOCIETY

1. THE IOWA SOCIETY of the Archaeological Institute of America is organized under the Regulations of the Institute adopted in 1884 and revised in 1897. It is intended to include members of the Institute resident in the state of Iowa, and such other members as may choose to be enrolled in it.

2. The officers of the Society shall be a President, two Vice-Presidents, and a Secretary and Treasurer. The President, the Secretary and Treasurer, and one additional member shall constitute the Executive Committee.

3. The entire government of the Society, including the election of members, shall be vested in the Executive Committee. They shall have no power to incur any expense for the Society which is not covered by its share in the funds of the Institute.

4. The annual meeting of the Society shall be held during the first week in December, the time and place to be determined by the Executive Committee. At this meeting the officers, including the third member of the Executive Committee, shall be elected to serve for one year (or until their successors are appointed). Special meetings may be called at any time by the President, and such meetings shall be called at the request of three members in writing.

5. These rules may be changed at the annual meeting, or at a special meeting called for the purpose, provided notice of the proposed change be sent to members two weeks before the meeting.

RULES OF THE PITTSBURGH SOCIETY

1. THE PITTSBURGH SOCIETY of the Archaeological Institute of America is formed of members of the Institute resident in Pittsburgh and the vicinity, and such other persons as may be elected to membership.

2. The officers of the Society shall consist of a President, four Vice-Presidents, a Secretary, and a Treasurer. These and four members of the Executive Committee shall be chosen by ballot, to serve one year and until their successors are elected.

3. The foregoing persons shall constitute an Executive Committee, which shall, subject to the control of the Society, be vested with the government of the Society, including the election of members, filling vacancies on the Committee, and the expenditures of the Society. Two members shall constitute a quorum of the Executive Committee.

4. The annual dues shall be \$10. The payment of \$100 entitles one to life membership in the Society and exemption from annual dues. The Society shall have no power to levy any assessment in addition to the annual dues, or incur any indebtedness beyond the cash means of the Society.

5. The annual meeting, for the election of officers and the transaction of other business, shall be held in November of each year, upon the call of the President, and special meetings may be called by the President or by seven members. A quorum of the Society shall consist of seven members.

RULES OF THE SOUTHWEST SOCIETY

1. The object of the Southwest Society of the Archaeological Institute of America shall be in general to forward the aims of the Institute; and in particular to stimulate and prosecute study and exploration of the American Southwest; to assemble and preserve the fruits of such research; and to conduct this study of "The Works of Men Before Us," not only as an academic interest but as a science truly and directly related to the very needs and utilities of Men To-day.

In pursuance of this generic aim, this Society shall have power to conduct excavations; to gather, acquire and have charge of, archaeological, ethnological and other collections; to record folklore, folk-songs, vocabularies, and the like; to purchase, hold, sell, and otherwise control, real and personal property in fact as in equity; to raise special funds, and to administer them, for said purposes; and to exercise all other rights and privileges that may logically and legally be involved in the prosecution of its organic plan.

2. Its officers shall be a President, four Vice-Presidents, a Secretary, a Treasurer, a Recorder and Curator, and an Executive Committee of seven. These officers, with additional Councillors (to be appointed by the Executive Committee) shall constitute an Advisory Council of twenty-five, whose duty shall be to advise with the Executive Committee when requested to do so. The direct management of the Society shall vest in the Executive Committee.

3. The officers shall be elected by a majority vote of members present at the annual meeting; except the Secretary, who shall be appointed by the Executive Committee. The Executive Committee shall be elected by the Council, and shall have power to fill vacancies in its own number. Terms of office shall be for one year or until the election of a successor.

4. The specific field of this Society is Southern California, Arizona, and New Mexico; but any reputable person, wherever resident, may become a member by subscribing to this constitution and paying the annual dues.

5. Fees for membership shall be \$10 per annum in advance and shall become due on the first day of December of each year, and delinquent on the first day of March following. The fee for life membership shall be \$100.

6. Meetings shall be at the call of the President or of the Executive Committee. The annual meeting shall be held in November, at call.

7. This constitution may be amended by a four-fifths vote of the Council; but only upon written notice of at least one month.

RULES OF THE COLORADO SOCIETY

ADOPTED APRIL 22, 1904

1. THE COLORADO SOCIETY of the Archaeological Institute of America is organized under the regulations of the Institute.

2. The membership shall consist of residents of Colorado, and such other members of the Institute as may desire to belong to it.

3. The officers of this Society shall be a President, four Vice-Presidents, a Secretary and a Treasurer, and an Executive Committee of five. Their term of office shall be one year, or until the election of their successors.

4. The President, Vice-Presidents, Secretary, and Treasurer shall be *ex-officio* members of the Executive Committee.

5. The annual dues shall be ten dollars (\$10). Life membership may be obtained by paying one hundred dollars (\$100) to the Society.

6. The government of the Society shall be vested in the Executive Committee, subject to the general Society.

7. No office or officer of this Society shall have power to involve the Society in any expense not covered by the funds under the control of this affiliated Society.

8. These rules may be changed at an annual meeting only. Notice of proposed change must be sent to the members two weeks before the meeting.

AMERICAN SCHOOL AT ATHENS

1904

THE American School of Classical Studies at Athens was founded by the Archaeological Institute of America in 1881, and is supported by the coöperation of leading American Universities and Colleges. It is in charge of a Managing Committee, and its property is vested in an incorporated Board of Trustees.

REGULATIONS OF THE SCHOOL

THE OBJECT OF THE SCHOOL

I. The object of the School shall be to furnish to graduates of American Universities and Colleges and to other qualified students an opportunity to study Classical Literature, Art, and Antiquities in Athens, under suitable guidance; to prosecute and to aid original research in these subjects; and to coöperate with the Archaeological Institute of America, so far as it may be able, in conducting the exploration and excavation of classic sites.

THE MANAGING COMMITTEE

II. The Managing Committee shall disburse the annual income of the school, and shall have power to make such regulations for its government as it may deem proper. Each of the Universities and Colleges uniting in support of the School shall have representation on the Committee. The President of the Archaeological Institute, the Director of the School, the Chairmen of the Managing Committees of the American School of Classical Studies in Rome and of the American School for Oriental Study and Research in Palestine, and the Editor-in-Chief of the Journal of the Institute, shall be *ex officio* members of the Committee. The Professors of the School shall also be members of the Committee during their year of office and the year following. The Committee shall have power to add to its membership.

III. The Managing Committee shall meet annually, in New York, on the Friday before the second Saturday in May. By special vote these meetings may be held elsewhere. Special meetings may

be called at any time by the Chairman. At any meeting, nine members of the Committee shall constitute a quorum for business.

IV. The officers of the Managing Committee shall be a Chairman, a Secretary, and a Treasurer. There shall be also an Executive Committee.

V. The Chairman of the Managing Committee shall be the official representative in America of the interests of the School. He shall present a Report annually to the Archaeological Institute concerning the affairs of the School.

VI. The Executive Committee shall consist of nine members. The Chairman, Secretary, and Treasurer of the Managing Committee, the President of the Archaeological Institute of America, and the Chairman of the Managing Committee of the American School of Classical Studies in Rome, shall be *ex officio* members of the Executive Committee; the other four members shall be chosen by the Managing Committee in the following manner: at the annual meeting in May, 1901, two members of the Managing Committee shall be chosen to serve for two years and two members to serve for one year, and at each subsequent annual meeting two members shall be chosen to serve for two years. The Chairman and Secretary of the Managing Committee shall be the Chairman and Secretary of the Executive Committee.

VII. The Managing Committee shall elect from its members as its representative an Associate Editor of the Journal of the Institute.

THE DIRECTOR AND THE PROFESSORS

VIII. The work of the School in Greece shall be under the superintendence of a Director. He shall be chosen and his salary shall be fixed by the Managing Committee. The term for which he is chosen shall be five years. He shall have charge of the School building, and shall be resident in Athens from the 1st of October to the 1st of July, with liberty to absent himself for short periods for purposes of exploration or research. He shall superintend the work of each member of the School, advising him in what direction to turn his studies, and assisting him in their prosecution. He shall have control of all excavations undertaken by the School. He shall make semi-annual Reports to the Managing Committee, in November and in May, of the work accomplished by the School.

IX. Each year the Managing Committee shall appoint from the instructors of the Universities and Colleges uniting in support of the School one or more Professors, who shall reside in Athens during the

ensuing year and take part in the instruction of the School. The Committee may appoint other Professors and Instructors, as circumstances require. In case of the illness or absence of the Director, the senior Professor shall act as Director for the time being.

X. The Director and Professors shall conduct regular courses of instruction, and shall at times hold public meetings at which such students of the School as they may select, or other persons invited by them to take part, shall read papers on subjects of their study and research, or make reports on the work undertaken by them or by the School.

THE SCHOOL YEAR

XI. The School year shall extend from the first day of October to the first day of July. During this period a regular member of the School shall ordinarily reside in Athens; but permission may be granted him by the Director to travel and study for a limited time elsewhere in Greece, in Greek lands, or in Italy. Further, under exceptional circumstances, with the consent of the Director and of the Chairman of the Managing Committee, a regular member of the School may be permitted to prosecute special studies in countries other than those just named, provided such studies are supplementary to work already begun in Athens.

THE MEMBERS OF THE SCHOOL

XII. Regular members of the School shall be those who are enrolled for a full year's work as candidates for a certificate. Associate members may be admitted to the School for a shorter term, but not for a period of less than three months; they shall be subject to the same regulations and shall be admitted to the same privileges as regular members, but they shall not be required to prepare a paper nor shall they receive a certificate.

XIII. Bachelors of Arts of coöperating Universities and Colleges, and all Bachelors of Arts who have studied at any of these institutions as candidates for a higher degree, shall be admitted to membership in the School on presenting to the Chairman of the Managing Committee a satisfactory certificate from the University or College at which they have last studied, stating that they are competent to pursue courses of study at the School. Such members shall be subject to no charge for tuition. All other persons who desire to become

members of the School shall make application to the Chairman of the Managing Committee, and if admitted they shall be required to pay a fee of \$25 per annum for tuition and library privileges. Students occupying rooms in the School building shall pay a fee of \$20 per annum for the use of furniture.

XIV. Every regular member of the School shall pursue some definite subject of study or research in Classical Literature, Art, or Antiquities, and shall present a paper embodying the results of some important part of his year's work, unless for special reasons he is excused from these obligations by the Director. His paper, if approved by the Director, shall be sent to the School's representative on the Editorial Board of the Journal of the Institute, in accordance with the provisions of Regulation XXI. If approved by the Editorial Board of the Journal also, it shall be issued as a Paper of the School.

XV. Excavation shall not be part of the regular work of a member of the School, but any member may, at the discretion of the Director, be permitted to take part in it. All work of excavation, of investigation, or of any other kind done by any member during his connection with the School, shall be regarded as done for the School and by the School, and shall be under the supervision and control of the Director.

XVI. No communication, even of an informal nature, shall be made by any member of the School to the public press, which has not previously been submitted to the Director and authorized by him.

XVII. Every regular member of the School who has completed one or more full years of study, the results of which have been approved by the Director, shall receive a certificate stating the work accomplished by him. This certificate shall be signed by the President of the Archaeological Institute, and the Chairman and the Secretary of the Managing Committee.

XVIII. Americans resident or travelling in Greece may, at the discretion of the Director, be allowed to enjoy the privileges of the School, although not enrolled as students.

FELLOWSHIPS

XIX. The Fellowships administered by the Managing Committee shall be awarded mainly by competitive examination. The subjects on which candidates will be examined, and the places and times at which examinations will be held, shall be announced not less than six months in advance.

XX. Every holder of one of these Fellowships shall be enrolled as a regular member of the School, and shall be required to fulfil the maximum requirement of residence, to present a paper embodying the results of some important part of his year's work, and to be a candidate for a certificate.

PUBLICATIONS

XXI. All manuscripts, drawings, or photographs intended for publication in the Papers of the School shall be sent, after approval by the Director, to the School's representative on the Editorial Board of the Journal of the Institute.

XXII. Every article sent for publication shall be written on comparatively light paper of uniform size, with a margin of at least two inches on the left of each page. The writing shall be on only one side of the leaf, and shall be clear and distinct, particularly in the quotations and references. Especial care shall be taken in writing Greek, that the printer may not confound similar letters, and the accents shall be placed strictly above the proper vowels, as in printing. All quotations and references shall be carefully verified *by the author*, after the article is completed, by comparison with the original sources. Failure to comply with the provisions of this regulation shall be sufficient ground for the rejection of the article.

XXIII. At least two careful squeezes of every inscription discovered by the School shall be taken as soon as possible; of these one shall be sent at once to the Editor-in-Chief of the Journal of the Institute, the other shall be deposited in the Library of the School.

AMERICAN SCHOOL IN ROME

1903

THE American School of Classical Studies in Rome was founded by the Archaeological Institute of America in 1895. It is in charge of a self-perpetuating Managing Committee, and is supported by the coöperation of the corporations and alumni of a considerable number of American universities and colleges, and by private generosity. The title to its permanent fund and other property is vested in an incorporated Board of Trustees.

REGULATIONS

NAME AND OBJECT OF THE SCHOOL

I. The School shall be called The American School of Classical Studies in Rome. Its object shall be to promote the study of Classical Literature in its bearing upon antiquities and history; of Classical, Etruscan, and Italic Art and Archaeology, including Topography, Palaeography, and Epigraphy; and of the Art and Archaeology of the early Christian, the Mediaeval, and the Renaissance periods within the boundaries of Italy.

It shall furnish regular instruction and guidance in some or all of these subjects, shall encourage and assist in original research and exploration, and shall coöperate as far as practicable with the Archaeological Institute of America, and with the American School of Classical Studies at Athens, with which it is affiliated.

GENERAL MANAGEMENT OF THE SCHOOL

II. The general affairs of the School shall be under the direction of a Managing Committee, which shall have authority to enlarge, reduce, or otherwise change its own membership, to determine the expenditure of the current funds of the School, and of the income from all invested funds and other property held in trust for the School by its Trustees, and to make such regulations for its own government and for that of the School as it may deem proper.

The President of the Archaeological Institute of America, the Editor-in-Chief of the Journal of the Institute, the Chairmen of the Managing Committees of the American School of Classical Studies at Athens and of the American School for Oriental Study and Research in Palestine, and the Director and Professors of the American School of Classical Studies in Rome, shall be members *ex officio* of the Managing Committee.

III. The Managing Committee shall meet annually in New York City on the Thursday before the second Saturday in May. A special meeting of the Committee may be called at any place or time by the Chairman at the request, or with the consent, of a majority of the Executive Committee. Twelve members shall constitute a quorum for the transaction of business.

IV. The officers of the Managing Committee shall be a Chairman, a Secretary, and a Treasurer, who shall be elected annually at the meeting in May, and shall serve for one year from the first day of September next following, or until their successors are duly elected and qualified. The Chairman shall be the official representative in America of the interests of the School. He shall present a report annually to the Council of the Archaeological Institute of America at its meeting in May.

V. In the intervals between the meetings of the Managing Committee the direction of the affairs of the School shall be vested in an Executive Committee, to consist of eleven members. The Chairman, the Secretary, and the Treasurer of the Managing Committee, the President of the Archaeological Institute of America, and the Chairman of the Managing Committee of the American School of Classical Studies at Athens, shall be members *ex officio* of the Executive Committee, and the first two named shall be respectively its Chairman and Secretary. The remaining six members of the Executive Committee shall be elected annually by the Managing Committee at its meeting in May, and shall serve for one year from the first day of September next following.

The Executive Committee shall have full authority to act for the Managing Committee in all matters arising in the intervals between the meetings of the Managing Committee: but it shall make no change in the appropriations for expenditure determined by the Managing Committee, unless in time of emergency, and by the unanimous vote of all its members. It shall present to the Managing Committee at its meeting in May a report of all its actions.

VI. The title to the permanent fund and other property of the School, exclusive of the funds for current expenses and of contribu-

tions of money for special objects, shall be vested in an incorporated Board of Trustees, to consist of not less than seven members. The Chairman and the Treasurer of the Managing Committee shall be members *ex officio* of the Board of Trustees. The remaining members shall be elected annually by the Managing Committee at its meeting in May, and shall serve for one year from the first day of September next following.

All income accruing from the permanent fund, or from other property held by the Trustees in trust for the School, shall be paid over by them into the hands of the Treasurer of the Managing Committee, at such intervals as he may determine, to be used as that Committee may direct.

The Trustees shall present annually to the Managing Committee at its meeting in May a report of the condition and manner of investment of all funds held by them in trust for the School.

VII. The Managing Committee shall elect annually at its meeting in May one of its members to serve as the representative of the School upon the Editorial Board of the Journal of the Institute for the year of that Journal next succeeding.

DIRECTION AND INSTRUCTION

VIII. The School shall be under the immediate superintendence of a Director, who shall be the representative in Italy of the Managing Committee. His term of office shall be five years, unless otherwise determined by the Managing Committee. He shall be elected, and his salary shall be fixed, by the Managing Committee, upon the recommendation of the Executive Committee. He shall reside in Rome during the whole of the school year, with liberty to absent himself for brief periods for purposes of exploration or research, or for the guidance of students of the School.

It shall be the duty of the Director to determine and supervise the studies of each Fellow and student of the School, to give such personal advice and assistance as may be practicable in the prosecution of independent study and investigation, and to conduct such regular courses of instruction as he may deem advisable. On the first day of April of each year he shall forward to the Chairman of the Managing Committee a preliminary report of the work of the School during the school year then current, and on the first day of September of each year he shall forward a final report, which shall be printed in whole or in part, at the discretion of the Chairman, in the Journal of the Institute.

IX. The Managing Committee, upon the nomination of the Executive Committee, may also appoint one or more Professors, who shall reside in Rome during a part or the whole of the school year, and shall give courses of regular instruction in the School according to their own discretion, with the approval of the Director. Each Professor shall be invited to forward to the Chairman of the Managing Committee on the first day of April of each year a preliminary report of his official services during the school year then current, and to forward a final report on the first day of September.

In case of the absence or disability of the Director, one of the Professors may be designated by the Director, or, failing that, by the Chairman of the Managing Committee, to act as Director for the time being.

X. The Director shall have authority to arrange each year for such other lectures, archaeological excursions, or other forms of instruction as he may think desirable; but the total expense incurred therefor, exclusive of gifts made for that specific purpose, shall not exceed the limit of appropriation fixed by the Managing Committee.

THE SCHOOL YEAR

XI. The school year shall extend from the fifteenth day of October to the first day of July. During this period Fellows and students of the School shall ordinarily reside in Rome; but permission may be granted by the Director to travel and study for a limited time elsewhere in Italy, or in Greece; and under exceptional circumstances, with the consent of the Director and of the Professor or Professors of the School, a Fellow or student may receive permission to prosecute special studies elsewhere than in Italian or Greek lands, provided such studies are in necessary continuation of some specific piece of work already begun in Rome.

FELLOWS

XII. The Fellowships administered by the Managing Committee shall be awarded mainly by competitive examination. The Managing Committee shall annually, at its meeting in May, appoint three of its members to serve as a Committee on Fellowships, and the committee thus constituted shall have authority over all matters connected with the examinations for and the award of the Fellowships.

The Committee on Fellowships shall annually cause to be published, in the *Journal of the Institute* and elsewhere, at least one year in advance of the time of the examinations, a circular of infor-

mation concerning the Fellowships, in which the places, dates, subjects, and scope of the examinations shall be specified.

The Fellowships shall be awarded for one year; but a Fellow in Classical Archaeology may be reappointed for a second year without examination, at the discretion of the Committee on Fellowships, on the recommendation of the Director and the Professors of the School. There shall not, however, be more than one such reappointment in any year.

Fellows shall be exempt from the charge for tuition, but shall in all other respects fulfil the maximum duties of students of the School, including that of the study of some special subject, and the preparation of a paper, in accordance with the provisions of the second paragraph of Regulation XIII. Each Fellow may also be required by the Director to devote some portion of his time to assistance in the guidance of other students or in the administrative work of the School. No Fellow may engage in any other occupation which, in the judgment of the Director, interferes in any way with his proper work as a Fellow of the School. On the first day of February and the first day of July of each year each Fellow shall forward to the Chairman of the Committee on Fellowships a detailed report of the way in which he has employed his time since his appointment to the Fellowship, or since the date of his last report.

STUDENTS

XIII. Bachelors of Arts of Universities and Colleges in good standing shall be admitted to membership in the School on presenting to the Chairman of the Managing Committee a satisfactory certificate from the University or College at which they have last studied, that they are competent to pursue courses of study in the School. It is expected of all students that they shall have specialized in classics during their undergraduate course, and shall have a reading knowledge of German, French, and Italian. Students who have received the A.B. degree at any of the coöperating Colleges and Universities, or who have studied at any of these institutions for a higher degree, shall be subject to no charge for tuition. All other students shall be required to pay a fee of \$25 per annum for tuition and library privileges. Students who have already taken a year or two of graduate work will be better prepared to profit by the advantages of the School.

Every such student of the School shall ordinarily reside in Rome during the whole of the school year, as specified in Regulation XI,

and shall pursue such studies as the Director may approve, according to the second paragraph of Regulation VIII. Furthermore, he may select, with the advice of the Director, some definite topic for investigation within the range of subjects specified in Regulation I, and present thereupon a paper, which, if approved by the Director, shall be submitted to the Editor-in-Chief of the Journal of the Institute, with a view to acceptance and publication in that Journal as a paper of the School.

Each student of the School who has completed to the satisfaction of the Director one or more full years of study, including the preparation of a paper, in accordance with the second paragraph of this Regulation, shall receive a certificate stating the work accomplished; and this certificate shall be signed by the Director of the School.

SPECIAL STUDENTS

XIV. Persons otherwise fully qualified to be admitted as regular students of the School, but unable to remain in residence for an entire school year, may, under exceptional circumstances, be admitted as special students. But such special students shall not be admitted for a period of less than three months, and they shall fulfil all other requirements made of regular students, including the payment of the full tuition fee of \$25 (unless exempted from such payment under the provisions of the third paragraph of Regulation XIII). Regular students who are absent from their duties a considerable part of the year shall be removed to the class of special students.

The names of both regular and special students shall be published in all official lists of students of the School, but in separate classes.

MISCELLANEOUS

XV. Persons residing or travelling in Italy, who are not members of the School, may be admitted to some or all of its privileges for a longer or shorter time at the discretion of the Director.

XVI. All studies or work of investigation or exploration carried on by any Fellow or student during his membership in the School shall be considered a part of his work as a student of the School, and shall be under the supervision and control of the Director.

No communication of any sort to the public press, and no other publication relating to the studies or work of the School, shall be made by any Fellow or student without the authorization of the Director.

XVII. Any matter of administration not provided for in these Regulations may be provided for by a Standing Resolution, which shall require the previous recommendation of a majority of all the members of the Executive Committee, and the adoption by a majority vote of all the members present at a meeting of the Managing Committee, and being thus adopted shall remain in force until rescinded in the same form in which it was adopted; except that for the rescinding of a Standing Resolution the previous recommendation of the Executive Committee shall not be required.

XVIII. These Regulations may be altered or amended by a majority vote of all the members present at any meeting of the Managing Committee, provided such alteration or amendment shall have previously received the approval of a majority of all the members of the Executive Committee.

AMERICAN SCHOOL FOR ORIENTAL STUDY AND
RESEARCH IN PALESTINE

1903

THE American School for Oriental Study and Research in Palestine was founded in 1900, under the auspices of the Society of Biblical Literature and Exegesis and the Archaeological Institute of America. It is supported by the coöperation of a number of American Universities and Seminaries, and by individual patrons.

REGULATIONS

I. The object of the School shall be to furnish to properly qualified American students an opportunity to study, in Syria, Biblical literature; the history, geography, and archaeology of Syria and Palestine; and the ancient and modern languages of the country; to prosecute and aid original research; and to contribute, as opportunity may offer, to the advancement of knowledge in these subjects.

II. The Managing Committee shall include one representative from each of the Universities, Colleges, or Seminaries which support the School; all individuals who contribute to it not less than \$100 a year; three members chosen by the Society of Biblical Literature and Exegesis; the President of the Archaeological Institute of America, and the Chairmen of the Managing Committees of the Schools of Classical Studies at Athens and in Rome, *ex officio*. The Committee shall have power to add to its membership. The Managing Committee shall meet annually in connection with the Society of Biblical Literature and Exegesis, or at such time and place as it may itself appoint. Special meetings may be called by the Chairman, and must be called at the request of a majority of the Committee. Nine members of the Committee shall constitute a quorum for business.

III. The Executive Committee shall consist of seven: the President of the Archaeological Institute of America, *ex officio*; five members chosen by the Managing Committee at its annual meeting, to hold office for one year, or till their successors are appointed;

and the Director of the School in Palestine, in the year next following his term of service.

IV. The Executive Committee shall choose its own officers, shall have charge of all money contributed to the School, shall appoint Directors of the School and fix their salaries, designate Fellows, act on applications for admission to the School, and do such other things as the interests of the School may require. It shall make an annual report in writing to the Managing Committee.

V. Changes in these Regulations may be made by a majority of the members of the Managing Committee present at any annual meeting.

VI. The School shall be under the superintendence of a Director appointed by the Executive Committee. It shall be the duty of the Director to secure and maintain quarters for the School, with the approval of the Executive Committee; to have charge of the property of the School; to superintend the work of the Fellows and students, giving them such direction, advice, and assistance as they severally need in prosecuting their studies; and to have the responsible oversight of all archaeological journeys and researches. At the close of each School year the Director shall make a written report to the Managing Committee of the work accomplished by the School. The Executive Committee may, at its discretion, appoint Associate Directors and Lecturers in the School, and define their duties and their relations to the Director.

VII. The School year shall extend from the 1st of October to the 1st of June. The Director, Fellows, and regular students of the School are expected during this term to be in residence in Jerusalem, except as, under the authority of the Director, they may be engaged in travel or research germane to the purpose of the School.

VIII. Fellowships in the School shall be filled by the Executive Committee, mainly by competitive examination. The Committee shall cause to be published in the *Journal of Biblical Literature*, the *American Journal of Archaeology*, and in a circular to the supporting institutions, information concerning the Fellowships, in which the subjects and scope of the examinations are defined, and the time and place at which they will be held specified.

IX. Bachelors of Arts or of Divinity of American Universities, Colleges, or Theological Schools, and, in exceptional cases, other qualified persons, may be admitted to the School as students on submitting to the Chairman of the Executive Committee satisfactory evidence that their previous studies have been of such a character as to fit them to profit by the opportunities that the School affords.

X. Students who have previously been members of any of the supporting institutions shall, upon application from that institution, be exempt from all charges for tuition. All other students will be required to pay into the treasury of the School, through the Director, an annual fee of \$25.

XI. Both men and women shall be received as students upon the conditions set forth above; and no preference shall be shown to any religious denomination.

XII. Residents or travellers in Palestine, who are not regular members of the School, may, at the discretion of the Director, be enrolled as Special Students, and enjoy the privileges of the School. Such students shall pay a tuition fee of \$25, except as provided in X. above.

XIII. All studies and researches by members of the School, designed for publication, shall be put in the hands of the Executive Committee, which shall decide how and where they shall be published. Articles the subject of which falls in the field of Biblical philology, criticism, or history shall be printed by preference in the *Journal of Biblical Literature*; those of a more distinctly archaeological character, in the *American Journal of Archaeology*.

XIV. No communication of any sort, relative to the School, its members, work, or interests, shall be given to the public press by any one connected with the School without having been previously submitted to the Director, and publication authorized by him.

TWENTY-FIFTH FINANCIAL STATEMENT

August 31, 1903, to August 31, 1904

The Council of the ARCHAEOLOGICAL INSTITUTE OF AMERICA

In account with JAMES H. HYDE, Treasurer

<i>Cr.</i>		<i>Dr.</i>
Balance, August 31, 1903	\$4,519.92	
New York Society	1,900.00	\$600.00
Baltimore Society	278.37	600.00
Pennsylvania Society	1,400.00	600.00
Chicago Society	680.00	500.00
Detroit Society	400.00	550.00
Wisconsin Society	140.00	300.00
Cleveland Society	550.00	5,686.02
Connecticut Society	600.00	564.42
Missouri Society	99.00	88.24
Iowa Society	30.00	620.36
Pittsburgh Society	300.00	
Southwest Society	1,450.00	422.76
Journal of the Institute, Vol. VII:		
School at Athens	\$800.00	70.50
School in Rome	800.00	191.65
Sale of publications		2.48
Advertising		
Interest on deposits	99.94	4,487.48
	<u>\$15,283.91</u>	<u>\$15,283.91</u>

New York, August 31, 1904. *E. E.*

JAMES H. HYDE, Treasurer.

Journal of the INSTITUTE

August 31, 1903, to August 31, 1904

<i>Cr.</i>			<i>Dr.</i>
Balance, August 31, 1903	\$877.40	Composition, electrotyping, and time	\$1,983.98
F. W. Shipley, offprints	86.20	Presswork and paper for cover	825.48
C. H. Weller, offprints	4.40	Binding	293.34
A. L. Frothingham, offprints	11.35	Paper	524.52
G. M. Lane, advertisement, Vari articles	22.00	Plates and cuts	278.90
C. C. Cuyler, advertisement	2.00	Postage and expressage at office of publication	259.59
Interest on deposits	28.07	General expenses at office of publication	146.74
From Treasurer of the Archaeological Institute:		Business Manager, postage, printing, etc.	113.25
Volume VII, third payment.	\$1,666.68	J. H. Wright, salary account, Volume VII	250.00
Volume VIII, first payment.	1,666.66	" " " " " " " " " " " "	250.00
Volume VIII, second payment.	1,666.66	J. M. Paton, " " " " " " " " " " " "	250.00
Volume VIII, extra grant	400.00	" " " " " " " " " " " "	250.00
Advertisements	24.00	J. S. Cushing & Co., for Institute	48.60
Supplement account	245.32	Subscription to foreign periodicals	13.27
Miscellaneous	16.70	Balance, August 31, 1904	1,229.77
	5,686.02		\$6,717.44
	<u>\$6,717.44</u>		<u>\$6,717.44</u>

CLARENCE H. YOUNG, *Business Manager.*

FINANCIAL STATEMENTS OF THE TREASURERS OF THE AFFILIATED SOCIETIES

August 31, 1903, to August 31, 1904

THE BOSTON SOCIETY *in account with* GARDINER MARTIN LANE, *Treasurer**Cr.*

Cash on hand, September 1, 1903.	\$30.26
Annual subscriptions	1,720.00
Life memberships	200.00
Interest on deposits	14.86
	<u>\$1,965.12</u>

	<i>Dr.</i>
Cost of lectures.	\$114.04
Expense connected with annual meeting	3.75
Cost of stationery, etc. (Treasurer's office)	22.00
Expenses of Committee on Membership	18.30
Charges for collecting checks	.40
Cash on hand August 31, 1904.	1,806.63
	<u>\$1,965.12</u>

THE NEW YORK SOCIETY *in account with* EDWARD L. TILTON, *Treasurer**Cr.*

Cash on hand, September 1, 1903.	\$96.94
Interest on deposits in Union Trust Company	8.95
Dues received:	
From annual members	\$1,880.00
new annual members	20.00
annual members in arrears	50.00
	<u>1,950.00</u>
	<u>\$2,055.89</u>

	<i>Dr.</i>
Printing	\$52.65
Clerical work	26.96
To James H. Hyde, Treasurer of the Institute	1,900.00
Collections	1.30
Balance, August 31, 1904	74.98
	<u>\$2,055.89</u>

FINANCIAL STATEMENTS OF THE TREASURERS OF THE AFFILIATED SOCIETIES (Continued)

THE BALTIMORE SOCIETY in account with EDGAR G. MILLER, Treasurer

<i>Cr.</i>		<i>Dr.</i>	
Cash on hand, September 1, 1903.	\$3.75	Expenses of four illustrated lectures.	\$55.38
Receipts from prior years	20.00	Printing	1.90
Receipts from current year	380.00	Remitted to James H. Hyde, Treasurer	278.37
		Balance, August 31, 1904	68.10
	<u>\$403.75</u>		<u>\$403.75</u>

THE PENNSYLVANIA SOCIETY in account with WILLIAM N. BATES, Treasurer

<i>Cr.</i>			<i>Dr.</i>		
Cash on hand, September 1, 1903.	• • • • •	\$54.48	Remitted to James H. Hyde, Treasurer.	• • • • •	\$1,400.00
Back dues	• • • • •	30.00	Lectures	• • • • •	5.90
Dues	• • • • •	1,150.00	Printing and postage	• • • • •	278.25
Life membership fees	• • • • •	600.00	Balance, September 1, 1904.	• • • • •	151.33
Donation	• • • • •	1.00			
		<u>\$1,835.48</u>			<u>\$1,835.48</u>

THE CHICAGO SOCIETY in account with EDWARD CAPPS, Treasurer

<i>Cr.</i>			<i>Dr.</i>	
Cash on hand, September 1, 1903.		\$16.25	Expenses of Society	\$32.13
Fees from annual members		680.75	Remitted to James H. Hyde, Treasurer	680.00
Fees overdue		20.00	Balance, September 1, 1904.	4.87
		<u>\$717.00</u>		<u>\$717.00</u>

THE DETROIT SOCIETY in account with GEORGE W. BATES, Acting Treasurer

<i>Cr.</i>		<i>Dr.</i>	
Cash on hand, September 1, 1903.	\$1.22	Printing and postage	\$166.08
Received from annual members in arrears.	60.00	Expenses of lectures	107.75
Received from annual members	775.00	Miscellaneous expenses	39.40
		Remitted to James H. Hyde, Treasurer	400.00
		Balance, August 31, 1904	122.99
	<u>\$836.22</u>		<u>\$836.22</u>

THE WISCONSIN SOCIETY in account with M. S. SLAUGHTER, Treasurer

<i>Cr.</i>			<i>Dr.</i>
Cash on hand, September 1, 1903.		\$10.00	Remitted to Treasurer of the Institute
Dues of annual members		140.00	Disbursed for postage.
			Balance, August 31, 1904
		<u>\$150.00</u>	<u>\$150.00</u>
			\$140.00
			2.15
			7.85
			\$150.00

THE CLEVELAND SOCIETY in account with HAROLD N. FOWLER, Treasurer

<i>Cr.</i>			<i>Dr.</i>		
Cash on hand, September 1, 1903.	• • • • •	\$25.59	Printing, postage, and stationery	• • • • •	\$18.10
Fees from annual members.	• • • • •	470.00	Stereopticon and lighting	• • • • •	7.00
Overdue fee	• • • • •	10.00	Remitted to James H. Hyde, Treasurer.	• • • • •	550.00
Fee from life member	• • • • •	100.00	Miscellaneous	• • • • •	15.65
			Balance, August 31, 1904	• • • • •	14.84
		<u>\$605.59</u>			<u>\$605.59</u>

FINANCIAL STATEMENTS OF THE TREASURERS OF THE AFFILIATED SOCIETIES (Continued)

THE CONNECTICUT SOCIETY in account with H. M. REYNOLDS, Treasurer

<i>Cr.</i>			<i>Dr.</i>
Cash on hand, September 1, 1903.	• • • • •	\$24.96	Expenses of Society • • • • •
Fee from life member	• • • • •	100.00	Remitted to James H. Hyde, Treasurer. • • • • •
Fees from annual members	• • • • •	580.00	Balance, September 1, 1904. • • • • •
		<u>\$704.96</u>	<u>\$704.96</u>

THE WASHINGTON SOCIETY in account with JOHN B. LARNER, Treasurer

<i>Cr.</i>			<i>Dr.</i>		
Cash on hand, August 31, 1903		\$40.00	Printing, typewriting, etc.		\$143.75
Fees from annual members, 1903.		40.00	Lectures		88.00
Fees from annual members, 1904.		1,090.00	Hotel bills		30.15
Fees from annual members, 1905.		40.00	Balance, September 1, 1904.		948.10
		<u>\$1,210.00</u>			<u>\$1,210.00</u>

THE IOWA SOCIETY in account with MRS. MAYER, Treasurer

<i>Cr.</i>		<i>Dr.</i>	
Balance on hand	\$7.55	Stamps	\$14.50
From dues	259.65	Travelling expenses	26.75
		Initial lecture in Des Moines	38.40
		Other lectures in Des Moines and Iowa City	39.30
		Sent to James H. Hyde, Treasurer	120.00
		Printing and janitor	2.00
		Balance on hand	26.25
	<u>\$267.20</u>		<u>\$267.20</u>

THE MISSOURI SOCIETY in account with W. E. GRUBE, *Treasurer*

<i>Cr.</i>		<i>Dr.</i>	
Cash on hand, September 1, 1903.	\$24.00	Postage and stationery	\$50
Annual dues, 1903-04	110.00	Remitted to James H. Hyde, Treasurer	99.00
		Balance, August 31, 1904	34.50
	<u>\$134.00</u>		<u>\$134.00</u>

THE PITTSBURGH SOCIETY in account with W. M. A. WAY, *Treasurer*

<i>Cr.</i>		<i>Dr.</i>	
Cash on hand, September 1, 1903.	\$377.45	Expenses of Society	\$296.25
Fees from annual members	280.00	Remitted to James H. Hyde, Treasurer	300.00
Interest	4.80	Balance, September 1, 1904.	66.00
	<u>\$662.25</u>		<u>\$662.25</u>

THE SOUTHWEST SOCIETY in account with N. C. PATTERSON, *Treasurer*

<i>Cr.</i>		<i>Dr.</i>	
Fees from life members	\$1,000.00	Remitted to James H. Hyde, Treasurer	\$1,450.00
Fees from annual members	900.00	Expenses of 16 lectures in 7 cities and towns of Southern California	86.95
		Printing, pamphlets, stationery, etc.	84.10
		Postage	40.15
		Exchange and miscellaneous	1.74
		Cash on hand	237.06
	<u>\$1,900.00</u>		<u>\$1,900.00</u>

TWENTY-SECOND FINANCIAL STATEMENT

September 1, 1903, to August 31, 1904

The Managing Committee of the AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

In account with GARDINER MARTIN LANE, Treasurer

<i>Cr.</i>		<i>Dr.</i>
Cash in hands of Treasurer, Sept. 1, 1903,		
belonging to the following accounts:		
Heraeum publication	\$3,139.55	
Excavations at Corinth, architectural		
fund	385.00	
Agnes Hoppin Memorial Fellowship	500.00	
Endowment fund	200.00	
For general expenses	4,994.47	
Subscription, 1901-02:		
Princeton University	250.00	
Subscriptions, 1902-03:		
Amherst College	\$200.00	
Bryn Mawr College	250.00	
Columbia University	215.00	
Princeton University	250.00	
University of Vermont	45.00	
Wellesley College	250.00	
Subscriptions, 1903-04:		
Bryn Mawr College	\$250.00	
Columbia University	200.00	
Cornell University	250.00	
Harvard University ¹	155.00	
Johns Hopkins University	250.00	
Salary of Director		\$2,000.00
Library (books and binding)		500.00
Repairs of building, service, lights, etc.		1,000.00
Fellowships:		
1903-04		\$800.00
1904-05		400.00
Fellowship in Architecture		1,200.00
Printing:		
Journal of Archaeology		800.00
Sundry		53.50
Travelling expenses of Director		100.00
Travelling expenses of Annual Professor:		
1903-04		500.00
1904-05		250.00
Agnes Hoppin Memorial Fellowship, 1903-04		750.00
Excavations at Corinth, remitted Director		500.00
Endowment fund, paid Treasurer of Trustees of endow-		1,500.00
ment fund		3,000.00
Heraeum publication:		
Paid E. L. Tilton, Esq., balance of salary		\$100.00
Sundry		10.80
Treasurer's clerk, 1903-04		110.80
Committee expenses		100.00
		47.03

Mount Holyoke College	250.00	Petty expenses	36.21
Princeton University	250.00	Balance, cash in hands of Treasurer, August 31, 1904,	
Smith College	250.00	belonging to the following accounts:	
University of Chicago	250.00	Lantern slides	\$100.00
University of Michigan	200.00	Heraeum publication	8,149.55
University of Vermont	150.00	Endowment fund	200.00
Wellesley College	250.00	Excavations at Corinth	10.00
Wesleyan University	200.00	For general expenses	4,250.87
Williams College	250.00		7,710.42
Yale University	250.00		
Subscription, 1904-05:	3,405.00		
Vassar College	250.00		
Gifts:			
For stereopticon	\$100.00		
For excavations at Corinth	1,510.00		
Income from endowment fund	3,676.70		
Subscription to Heraeum publication	10.00		
Archaeological Institute:			
Fellowship, 1903-04	600.00		
Interest on deposits	177.24		
	<u>\$20,407.96</u>		
Boston, August 31, 1904.	<i>E. & O. E.</i>	GARDINER MARTIN LANE, Treasurer.	<u>\$20,407.96</u>

¹ Subscription of Harvard University funded in part.

NINTH FINANCIAL STATEMENT

September 1, 1903, to August 31, 1904

GENERAL ACCOUNT

The Managing Committee of the AMERICAN SCHOOL OF CLASSICAL STUDIES IN ROME

In account with C. C. CUYLER, Treasurer

<i>Cr.</i>		<i>Dr.</i>	
Cash in hands of bankers in New York, September 1, 1903	\$2,572.85	Expenses in Italy:	
Cash in hands of bankers in Rome, September 1, 1903	235.51	Salary of the Director	\$3,000.00
	<u>\$2,808.36</u>	Salary of the Professor of Latin	1,000.00
Subscriptions to current expense fund, representing:		Two Fellowships	1,200.00
Barnard College	\$100.00	Mr. De Cou's salary	1,000.00
Bryn Mawr College	200.00	Additional instruction	114.28
Columbia University	250.00	Library	1,191.73
Cornell University	250.00	Rent	2,285.71
Harvard University	250.00	Fuel	46.57
Johns Hopkins University	250.00	Light	44.97
Mt. Holyoke College	250.00	Furnishings	19.05
Smith College	200.00	Service	357.45
Syracuse University	100.00	Insurance	6.43
University of Chicago	250.00	Repairs	24.03
University of Wisconsin	100.00	Supplies	6.45
Vassar College	70.00	Garden	68.57
Wellesley College	250.00	Director's office expenses (postage, printing, stationery, etc.)	18.12
Western Reserve University	110.00	Police	24.76
Yale University	250.00	Upper apartment	64.79
University of Pennsylvania	250.00	Legal advice	94.25
Subscriptions from alumni representing:		Expenses in America:	\$10,567.16
Brown University	230.00	Expenses of Treasurer:	
Columbia University	405.00		

Harvard University	670.00	Postage, stationery, printing, collection charges, type-writing, telegrams, cables, etc.	\$191.48
Princeton University	895.00	Collector's salary and commissions	610.00
Yale University	440.00	Clerical services	150.00
Williams College	10.00	Expenses of Chairman:	
Individual subscriptions received in America	2,650.00	Allowance for fiscal year	
Archaeological Institute of America:		1903-04	150.00
Fellowship	600.00	Allowance for previous year, not heretofore paid	150.00
Subscriptions toward Fellowship in Christian Archaeology from:		Payment to Archaeological Institute of America, account of expense of publication of the Journal	800.00
Boston University School of Theology	25.00	Book supports for the Library and shipping charges on same	60.60
Harvard Divinity School	25.00	Expenses of F. W. Shipley, trip to St. Louis <i>in re</i> Arch of Trajan	55.90
Colgate University	25.00		916.50
Princeton Theological Seminary	25.00		\$12,735.14
Yale Divinity School	25.00	Balance on hand in Rome on August 31, 1904	2,097.64
Subscriptions for other special objects:		Balance on hand in New York on August 31, 1904	856.01
For the Library (including previously uncredited balances from fiscal year 1902-03)	2,189.22		
For Mr. De Cou's salary	1,000.00		
Tuition fees	104.76		
Interest on deposits in Rome	45.21		
Interest on deposits in New York	26.14		
Room rentals	233.00		
From the Director, to meet deficit in budget allowances for service, repairs, light, etc.	111.52		
Differences in Foreign Exchange in favor of the School	15.58		
	<u>\$15,688.79</u>		
New York, August 31, 1904. E. & O. E.		C. C. CUTLER, Treasurer.	
			<u>\$15,688.79</u>

NOTE. — Italian exchange is computed on an average basis of 5.25 lire to the dollar, on items of expenses in Italy.

FIFTH FINANCIAL STATEMENT

September 1, 1903, to August 31, 1904

The Managing Committee of the AMERICAN SCHOOL FOR ORIENTAL STUDY AND RESEARCH IN PALESTINE

<i>In account with JAMES HARDY ROPES, Treasurer</i>		<i>Dr.</i>	
<i>Cr.</i>			
Cash in hands of Treasurer, September 1, 1903, as follows:			
Fund for excavation, received through			
Rev. Dr. J. B. Nies	\$3,164.17		\$1,000.00
Fund for excavation, received through			276.42
Rev. Dr. J. P. Peters (balance) . . .	208.98		
Balance	2,410.34		
Subscriptions, 1902-03, representing:	\$5,783.49		
Columbia University	100.00		183.98
General Theological Seminary	100.00		600.00
Hebrew Union College	100.00		32.42
Princeton University	100.00		349.24
Subscriptions, 1903-04, representing:	400.00		14.41
Andover Theological Seminary	100.00		
Auburn Theological Seminary	100.00		
Boston University	100.00		
Brown University	100.00		
Bryn Mawr College	100.00		
Colgate University	100.00		
Columbia University	100.00		
Cornell University	100.00		
Episcopal Theological School, Cambridge	100.00		
General Theological Seminary	100.00		
Salary of Director			
Library (books and binding)			\$2,970.00
Director's expenses:			
Rent, service, and fuel			
Fellowship			
Expenses of Committee			
Publishing "Papers"			
Exploration			
New York Central R.R. bonds purchased			
for account of Excavation Fund. . .			
Part of Suffolk Savings Bank deposit			
transferred to account of Excavation			
Fund		403.10	3,373.10
Balance in hands of Treasurer, August 31, 1904:			
Deposit, Provident Institution for Savings		\$1,119.36	
Part of deposit, Suffolk Savings Bank .		652.98	
Cash, State Street Trust Co.		1,166.12	2,938.46

Harvard University	100.00
Johns Hopkins University	100.00
Princeton Theological Seminary	100.00
Princeton University	100.00
Trinity College, Hartford	100.00
Union Theological Seminary	100.00
Yale Theological Seminary	1,700.00
Subscription, 1904-05, representing :	
Hartford Theological Seminary	100.00
Archaeological Institute of America, Appropriation	600.00
Individual subscriptions	75.00
Refunded	1.36
Interest on deposits	108.18
	\$8,768.03

CAMBRIDGE, August 31, 1904.

JAMES HARDY ROPES, *Treasurer.*

\$8,768.03

EXCAVATION FUND in account with JAMES HARDY ROPES, Treasurer

<i>Cr.</i>				<i>Dr.</i>
1903				
Nov. 13	Property transferred from General Account : \$3000 New York Central R.R.		Aug. 31	Balance, property in hands of Treasurer :
	1st mtg. bonds	\$2,970.00		Bonds
	Part of deposit, Suffolk Savings Bank, Boston	403.10		Part of deposit, Suffolk Savings Bank
1904				
May 23	Interest on bonds	13.12		
		<u>\$3,386.22</u>		
	CAMBRIDGE, August 31, 1904.			<u>\$3,386.22</u>
				JAMES HARDY ROPES, <i>Treasurer.</i>

CONTRIBUTORS TO THE SCHOOLS AT ATHENS
AND IN ROME

1903-1904

SCHOOL AT ATHENS

For Current Expenses

For Adelbert College of Western Reserve University:

Messrs. Charles W. Bingham, William E. Cushing, Samuel Mather, William G. Mather, Edwin R. Perkins.

For Brown University:

This subscription is secured in perpetuity by "The Albert Harkness Fund for the Benefit of Brown University."

Bryn Mawr College.

For Columbia University:

I. N. Seligman, Rutherford Stuyvesant, J. A. Browning, R. Fulton Cutting, George Sherman, Seth Low, Julius Sachs, E. R. A. Seligman, F. R. Coudert, Allister Greene, E. D. Perry, J. R. Wheeler.

Cornell University.

Dartmouth College, and certain individual contributors whose names will be printed in the next Report of the School.

For Harvard University:

Mrs. J. B. Ames, Mr. A. R. Benner, Mrs. W. G. Farlow, Messrs. W. W. Goodwin, J. C. Hoppin, James Loeb, C. E. Norton, D. W. Ross.

Johns Hopkins University.

Mt. Holyoke College.

Princeton University.

Smith College.

*Syracuse University.**For the University of California:*

Messrs. William Babcock, * Thomas R. Bacon, Charles R. Bishop, William B. Bourn, * Charles R. Brown, * Charles M. Gayley, Mrs. Phoebe A. Hearst, I. W. Hellman, * James McDonald, James D. Phelan, Louis Sloss & Co., Levi Strauss & Co., * Jacob Voorsanger, Raphael Weill, * Benjamin Ide Wheeler, and Alumni, Friends, and Undergraduates of the University of California.

Total contributions to the Permanent Fund, \$3892.24.

*University of Chicago.**For the University of Michigan:*

Messrs. Marcus Baker, T. B. Bronson, D. M. Ferry, F. L. Geddes, W. J. Gray, J. T. Michau, S. D. Miller, T. W. Palmer, E. W. Pendleton, L. S. Pilcher, W. Savidge, E. T. Tappey, B. Walker, Floyd B. Wilson, R. M. Wright, Mrs. Helen H. Newberry.

For the University of Vermont:

Messrs. Thomas S. Buckham, Charles A. Catlin, John H. Converse, J. H. Denison, E. N. Foss, Lewis Francis, F. T. Kidder, John C. King, P. F. Leavens, Elias Lyman, Horatio Loomis, F. R. Wells, Edward Wells, J. B. Wheeler, J. R. Wheeler, and Miss E. Mabel Brownell.

For Vassar College:

Mr. Samuel D. Coykendall.

*Wellesley College.**Wesleyan University.**Williams College.**Yale University.*

The Treasurer of the Managing Committee of the School at Athens gratefully acknowledges also the following gifts:

For the Excavations at Corinth:

Elliot C. Lee, Boston	\$1,000
J. M. Sears, Boston	500
	\$1,500

* These contributed lectures.

The following gifts are gratefully acknowledged by the Director of the School:

For the Excavations at Corinth:

Miss Burt Brittan	francs 100
R. B. Seager, Esq.	" 500
Anonymous	" 500
Professor Allan Marquand	drachmas 200

For General Expenses:

Theophilus M. Marc, Esq.	\$ 10
Clarence M. Hyde, Esq.	100
	<u>\$110</u>

For binding of Books:

Professor Allan Marquand	\$4
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SCHOOL IN ROME

For Current Expenses, Fellowship in Christian Archaeology, and Special Objects

Baltimore, Md.:

Johns Hopkins University.

Boston, Mass.:

Augustus Hemenway, Boston University School of Theology.

Bryn Mawr, Pa.:

Bryn Mawr College.

Cambridge, Mass.:

Harvard Divinity School, Professor C. H. Moore, H. W. Haynes, Prentiss Cummings, George Wigglesworth, H. P. Amen, Ginn & Co., Mrs. Susan C. Dove.

Chicago, Ill.:

University of Chicago.

Cleveland, Ohio:

Western Reserve University.

Evanston, Ill.:

Northwestern University.

Hamilton, N. Y.:

Colgate University.

Ithaca, N. Y.:

Cornell University.

Madison, Wis.:

University of Wisconsin.

New Haven, Conn.:

Yale University, Yale Divinity School.

New York, N. Y.:

Hon. Seth Low, Charles Fairchild, Ogden Mills, Winthrop Burr, O. T. Barnard, Dr. Walter B. James, Professor M. A. Pupin, William C. Osborn, George B. Agnew, Allison V. Armour, C. A. de Gersdorff, Harris E. Adriance, William B. Hornblower, Carroll Dunham, Charles F. Brown, Howard Mansfield, J. H. Hammond, Robert S. Brewster, E. D. Worcester Jr., Isaac N. Seligman, C. Ledyard Blair, Charles S. Fairchild, Edward King, L. E. Sexton, Robert Bacon, Charles B. Alexander, James W. Alexander, James H. Hyde, James Loeb, Thomas Thacher, Payson Merrill, H. D. Auchincloss, F. A. Schermerhorn, William Manice, David Willcox, J. W. Curtiss, Judge H. E. Howland, C. W. Kelsey, William C. Gulliver, W. T. Lawson, H. L. Satterlee, George G. DeWitt, C. R. Agnew, Oliver Harriman Jr., Pliny Fisk, James J. Higginson, Charles H. Tweed, E. P. Burgess, Parker D. Handy, D. W. McCord, John Farr, Joseph Larocque, George W. Seligman, Stuyvesant Fish, H. E. Meeker, C. H. Russell, Ashbel Green, J. R. Sheffield, A. P. Whitehead, John S. Baird, J. S. Young Jr., Rev. Morgan Dix, J. P. Morgan, J. P. Morgan Jr., Edward F. Whitney, William W. Lawrence, Howard McWilliams, R. E. Bonner, Richard Irvin, R. E. Annin, Glen Ford McKinney, Columbia University, George M. Tuttle, Charles A. Munn, Arthur Pell, W. W. Ross, George L. Rives, Julien T. Davies, William Baylis, E. C. Stedman, J. F. Kernochan, Albert Francke, R. H. Sayre, F. W. Rhineland, F. R. Appleton, Temple Bowdoin, Delancey Nicoll, John L. Cadwalader, George C. Comstock, O. G. Jennings, Edward Mitchell, Jefferson Seligman, R. Fulton Cutting, Herbert Parsons, Arthur Turnbull, James S. Dennis, S. S. Auchincloss, Clarence M. Hyde, M. V. B. Brinckerhoff, Archaeological Institute of America, Barnard College, Hon. C. M. Depew, F. H. Markol, I. N. Phelps Stokes, C. H. Dodge, John J. McCook, M. Taylor Pyne, E. B. Holden, Franklin Burdge, Gardner Colby, James May Duane, Manton B. Metcalf.

Northampton, Mass.:

Smith College.

Philadelphia, Pa.:

University of Pennsylvania.

Poughkeepsie, N. Y.:

E. S. Atwater, Irving Elting.

Princeton, N. J.:

Princeton Theological Seminary.

Providence, R. I.:

Sundry Brown University Alumni.

Rome, Italy:

Francis M. Whitehouse, Edward H. Kidder, C. F. Bradley, George A. Armour, Jacob H. Schiff, Professor Allan Marquand, Carroll Dunham, James Loeb, Arthur Eddy, Anonymous.

South Hadley, Mass.:

Mount Holyoke College.

Syracuse, N. Y.:

Syracuse University.

Wellesley, Mass.:

Wellesley College.

For Endowment Fund

Mrs. Elizabeth H. Kidder.

FELLOWSHIPS

1905-1906

IN THE SCHOOLS IN ATHENS AND ROME

Three or more Fellowships will be awarded for the year 1905-06: two in Greek Archaeology, with a stipend of six hundred dollars each, at the American School of Classical Studies at Athens; and one or two in Classical Archaeology, each with a stipend of six hundred dollars, and probably one for the study of Christian Archaeology, with a stipend of five hundred dollars, at the American School of Classical Studies in Rome.

These Fellowships are open to Bachelors of Arts of universities and colleges in the United States of America, and to other American students of similar attainments. They are awarded chiefly on the basis of competitive written examinations, but other evidence of the ability and attainments of candidates will be considered. They are awarded for one year; but a Fellow in Classical Archaeology in either School may, at the discretion of the Committee on Fellowships, be reappointed for a second term without an examination, on the recommendation of the Director and Professors of the School, provided that not more than one such reappointment may be made in either School in any year. No Fellowship may be held for more than two years.

The holders of these Fellowships will be enrolled as regular members of the School to which they are attached, and will be required to pursue their studies, under the supervision of its Director, during the full school year. But Fellows of either School, with the consent of the Director, may spend a limited portion of the year in residence at the other School, under the supervision of its Director. In addition to his general studies, each holder of a Fellowship is required to prosecute some definite subject of special research, and, after the completion of the year, to present a paper embodying the results of his investigation. Twice in the year, namely on February 1 and July 1, each Fellow will make a report to the Chairman of the Committee on Fellowships, with regard to the use which he has made of his time, and in particular and in detail

on the progress of his researches. For the prosecution of his special investigation he may obtain leave, under certain conditions, to supplement his studies at Athens or in Rome by researches elsewhere than in Greece or Italy. (See Regulations XI and XX of the School at Athens, and Regulations XI and XII of the School in Rome.) The Fellow must be a candidate for a certificate.

Each candidate must announce in writing his intention to offer himself for examination. This announcement must be made to the Chairman of the Committee on Fellowships of the School which the candidate wishes to join (Professor H. N. Fowler, *Western Reserve University, Cleveland, Ohio*, for the School at Athens; and Professor J. C. Rolfe, 4400, *Chestnut Street, Philadelphia, Pa.*, for the School in Rome), and must be in the Chairman's hands not later than February 1, 1905. The receipt of the application will be acknowledged and the candidate will receive a blank, to be filled out and returned to the Chairman by February 15, in which he will give information in regard to his studies and attainments. A copy of this blank may also be obtained at any time by application to the proper Chairman.

The examinations will be held in Athens, in Rome, and at any of the universities or colleges represented on the Managing Committee of either School, on Monday, Tuesday, and Wednesday, March 13, 14, and 15, 1905, for the Fellowships of the School in Rome; and on Thursday, Friday, and Saturday, March 16, 17, and 18, for the Fellowships of the School at Athens.

The award of the Fellowships will be made, and notice sent to all candidates, as soon as practicable after the examinations are held. This notice will be mailed probably not later than May 1. The income of these Fellowships is paid in three equal instalments on August 15, January 15, and June 1 for the School at Athens, and on September 1, January 1, and April 1 for the School in Rome.

The Fellowship examinations of 1906 will be held in March of that year under conditions similar to those which are stated above. Special inquiries on the subject of the Fellowships of the School at Athens should be addressed to Professor Harold N. Fowler, *Western Reserve University, Cleveland, Ohio*; and of the Fellowships of the School in Rome, to Professor John C. Rolfe, 4400, *Chestnut Street, Philadelphia, Pa.*

IN THE SCHOOL IN PALESTINE

The Thayer Fellowship with a stipend of six hundred dollars will be awarded for the year 1905-06, chiefly on the basis of a competitive written examination, although other evidence of ability and attainments on the part of candidates will be taken into consideration.

This Fellowship is open to Bachelors of Arts of universities and colleges in the United States of America, and to other American students of similar attainments. Candidates will be expected to have such a knowledge of Greek (including Hellenistic Greek), Latin, French, and German as will enable them to make effective use of books written in those languages. The examination will also include Biblical Hebrew, the history and geography of Palestine (ancient and modern), its archaeology, the elements of North Semitic epigraphy, and the outlines of Biblical and early Christian literature. Optional papers will be set in Syriac and modern written Arabic. Students who propose to devote themselves chiefly to the early Christian period or to mediaeval and modern times should shape their preparation accordingly, and will be permitted, on consultation with the Committee, to substitute other subjects for some of those named.

The examination will be held on the 13th, 14th, and 15th of March, 1905, at any one of the colleges or theological seminaries coöperating in the maintenance of the School, namely, Andover Theological Seminary, Auburn Theological Seminary, Boston University, Brown University, Bryn Mawr College, Colgate University, Columbia University, Cornell University, the Episcopal Theological School in Cambridge, Hartford Theological Seminary, Harvard University, the Hebrew Union College in Cincinnati, Johns Hopkins University, M'Cormick Theological Seminary, New York University, Princeton Theological Seminary, Princeton University, Trinity College in Hartford, Union Theological Seminary in New York, University of Pennsylvania, Yale University.

Persons intending to offer themselves for the examination should consult the Secretary of the Committee on Fellowships, Professor Charles C. Torrey, *Yale University, New Haven, Conn.*, and must announce to him their intention in writing not later than the first of February. On making such announcement the applicant will receive a blank to be filled out with information respecting his studies and attainments.

The award of the Fellowship will be made known to all candidates as soon after the examination as practicable, probably by the first of May.

The income of the Fellowship will be paid in two instalments of \$300 each,—the first on August 1, the second on the fifteenth day of the following May.

FELLOWSHIP EXAMINATIONS IN THE SCHOOL AT ATHENS

The examination in 1905 will cover the subjects mentioned below, and will be based on the books specially named. Other books are named for supplementary reading and reference. For additional titles, candidates are referred to the list of "Books Recommended," which was published in the Appendix to each of the first two volumes of the *Journal of Archaeology, Second Series*. Each candidate should strive to make his study of the special subjects in Greek Archaeology mentioned below as largely objective as possible, by the careful inspection and comparison of monuments of Greek art, in originals if possible, otherwise in casts, models, electrotypes, photographs, and engravings. The time at which examinations will be held in 1905 is named in each case. Details of the subjects of examination, particularly in Greek Architecture and Greek Sculpture, are subject to change from year to year.

Fellows are charged no fee for tuition. The men who are holders of fellowships will be allowed to occupy furnished rooms in the School building on payment each of \$20 per annum.

Fellows of the School are advised to spend the summer preceding their year at Athens in study at the museums of Northern Europe.

Greek Archaeology. An outline of Mycenaean art, and the study of Greek terra-cottas, numismatics, glyptics, small bronzes, and jewels. *One and one-half hours.* (Thursday, March 16, 9 A.M.)

Tsountas and Manatt, *The Mycenaean Age*; A. J. Evans, 'Mycenaean Tree and Pillar Cult,' *Journal of Hellenic Studies*, Vol. XXI; G. F. Hill, *Handbook of Greek and Roman Coins*; *Guide to the Perkins Collection of Greek and Roman Coins* in the Boston Museum of Fine Arts; Smith's *Dictionary of Antiquities*, the appropriate articles, 'Sculptura,' 'Monile,' 'Inauris,' etc.; similar articles in Baumeister, *Denkmäler des klassischen Alterthums*, named under 'II Kunstgeschichte,' in the 'Systematisches Verzeichniss,' at the close of the work; Catalogues of the British Museum, *Bronzes*, *Engraved Gems*; E. Pottier, *Statuettes de terre cuite dans l'antiquité*.

[NOTE. Collignon's *Manual of Greek Archaeology*, translated by J. H. Wright, is now out of date on many points, and cannot therefore be recommended without reserve. The same may be said of Murray's *Handbook of Greek Archaeology*.]

REFERENCE: Perrot and Chipiez, *Histoire de l'art dans l'antiquité*, Vol. VI; William Ridgeway, *The Early Age of Greece*; H. R. Hall, *The Oldest Civilization of Greece*; A. Furtwängler, *Die antiken Gemmen*.

Greek Architecture, with some special study of the *Tholos* at Epidaurus. *One and one-half hours.* (Thursday, March 16, 11 A.M.)

F. C. Penrose, *Principles of Athenian Architecture*, 2d edition; Choisy, *Histoire de l'architecture*, I (1898); J. Durm, *Baukunst der Griechen*, in his

Handbuch der Architektur, II, 1. The principal works of reference for the *Tholos* are as follows: Πρακτικὰ τῆς Ἀρχαιολογικῆς Ἑταιρίας for 1882 and 1883; Cavvadias, *Fouilles d'Épidaure*; *Antike Denkmäler*, II, pls. 2-5; Defrasse and Lechat, *Épidaure*. Supplementary discussions of this building are: Staïs, Ἐφημερὶς Ἀρχαιολογική, 1892, pp. 69-99; Keil, *Athenische Mittheilungen*, 1895, pp. 20-115; Dörpfeld, *Das griechische Theater*, pp. 130 ff.; and the summary account in Frazer's *Pausanias*, Vol. III, pp. 245-248.

REFERENCE: Perrot and Chipiez, *Histoire de l'art dans l'antiquité*, Vol. VII; F. v. Reber, *History of Ancient Art*, translated by Clarke; J. Overbeck, *Geschichte der griechischen Plastik*.

Greek Sculpture. *One and one-half hours.* (Thursday, March 16, 2 P.M.)

Gardner, *Handbook of Greek Sculpture*; Tarbell, *History of Greek Art*; Robinson, *Catalogue of Casts* (edition of 1896) in the Boston Museum of Fine Arts; Collignon, *Histoire de la sculpture grecque*.

REFERENCE: Overbeck, *Geschichte der griechischen Plastik*; Waldstein, *Essays on the Art of Phidias*; Mitchell, *History of Ancient Sculpture*; Furtwängler, *Masterpieces of Greek Sculpture*; Friederichs-Wolters, *Gipsabgüsse antiker Bildwerke*; Overbeck, *Die antiken Schriftquellen*. For the sculptures of the Parthenon, A. H. Smith, *Catalogue of Sculpture, British Museum*, I, with the series of Photographs of the Parthenon sculptures published by the London Stereoscopic and Photographic Company.

Greek Vases. *One and one-half hours.* (Friday, March 17, 9 A.M.)

Von Rohden, *Vasenkunde*, in Baumeister's *Denkmäler*; Robinson's Introduction to the *Catalogue of Greek, Etruscan, and Roman Vases* in the Boston Museum of Fine Arts; the Introductions to the Catalogues of vases in the British Museum; the Louvre *Catalogues des vases antiques de terre cuite*.

REFERENCE: Rayet et Collignon, *Histoire de la céramique grecque*; Furtwängler und Reichhold, *Griechische Vasenmalerei*; A. S. Murray and A. H. Smith, *White Athenian Vases in the British Museum*; Pottier's *Albums* to the Louvre Catalogues. See also the bibliography at the end of J. H. Huddleston's *Lessons from Greek Pottery*.

Modern Greek. *One hour.* (Friday, March 17, 11 A.M.)

Gardner, *A Modern Greek Grammar*, a translation and adaptation of Carl Wied's *Praktisches Lehrbuch der neugriechischen Volkssprache*; Jannaris, *Wie spricht man in Athen?* Mitsotakis, *Praktische Grammatik der neugriechischen Schrift- und Umgangssprache*; Rizo-Rangabé, *A Practical Method in the Modern Greek Language*; Thumb, *Handbuch der neugriechischen Volkssprache* (this last of scientific character). Specifically for the so-called literary language are Vincent and Dickson, *Handbook to Modern Greek*, and Stedman, *Modern Greek Mastery*. Constantinides, *Neo-Hellenica* is a Modern Greek reader, with an English translation of dialogues. For lexicons and information about publishers and prices, see *Journal of Archaeology* (Second Series), Vol. I or Vol. II, *ad fin.*

The examination will test both the candidate's ability to translate the literary language into English, and his knowledge of the common words and idioms of the every-day speech of the people.

Pausanias. Interpretation of Pausanias in his treatment of Athenian Monuments and Topography. *Two hours.* (Friday, March 17, 2 P.M.)

Pausanias, Book I, in the edition of Hitzig and Blümner; Translation and Commentary by J. G. Frazer; Harrison and Verrall, *Mythology and Monuments of Ancient Athens*; Lolling, *Topographie von Athen*, in von Müller's *Handbuch*, III; Milchhöfer, *Athen*, in Baumeister's *Denkmäler*; and Milchhöfer, *Schriftquellen zur Topographie von Athen*, in Curtius, *Stadtgeschichte von Athen*, pp. lxx-xciii, E-G.

REFERENCE: Curtius, *Stadtgeschichte von Athen*; Wachsmuth, *Die Stadt Athen im Alterthum*; Jahn-Michaelis, *Pausaniae Descriptio Arcis Athenarum*, 3d edition, 1901; E. A. Gardner, *Ancient Athens*.

Greek Epigraphy. *Three hours.* (Saturday, March 18, 9 A.M.)

Roberts, *Introduction to Greek Epigraphy*; Roehl, *Inscriptiones Graecae Antiquissimae*; Dittenberger, *Sylloge Inscriptionum Graecarum*; Hicks, *Manual of Greek Historical Inscriptions*, 2d edition.

SUPPLEMENTARY: Newton, *On Greek Inscriptions*, in his *Essays on Art and Archaeology*.

REFERENCE: Kirchhoff, *Geschichte des griechischen Alphabets*; Reinach, *Traité d'épigraphie grecque*; Michel, *Recueil d'inscriptions grecques*; Dareste, Haussoullier, et Reinach, *Recueil des inscriptions juridiques grecques*; the *Corpus Inscriptionum Atticarum*; Larfeld, *Griechische Epigraphik*, in von Müller's *Handbuch der klassischen Altertumswissenschaft*, I, 2d edition; Larfeld, *Handbuch der griechischen Epigraphik*, Vol. II, *Attische Inschriften*.

PAPERS SET AT THE FELLOWSHIP EXAMINATION OF
1904 FOR THE AMERICAN SCHOOL OF CLASSICAL
STUDIES AT ATHENS

GREEK ARCHAEOLOGY

THURSDAY, MARCH 17, 1904. 9 A.M.

(Time allowed: One and one-half hours)

The candidate will write on the topics marked with an asterisk (Nos. 1, 2, 6, and 10), and on one other in addition.

COINS

I. *1. (a) Describe in detail the construction and contents of one of the Shaft-graves at Mycenae. (b) What are the evidences for the date of the Mycenaean civilization?

II. *2. (a) "Partout les monnaies sont le reflet des commotions politiques, de l'histoire de l'art, de la vie municipale, de l'activité commerciale, de l'expansion et du rayonnement au dehors, de cette diversité d'institutions, d'usages, de traditions locales qui procure à l'étude de l'antiquité un si puissant attrait." Translate, and cite coins in illustration of this statement. (b) How would you determine the date of a Greek coin?

3. What are the types of the coins of Alexander the Great; of Rhodes, Tarentum, Cyrene? Where were the following types used: shield, labyrinth, Pegasus, tunny-fish, tortoise?

4. What do you understand by the following terms: incuse square, talent, *type parlant*, Attic standard, Demarateion, Philip? Give instances of coins with agonistic types.

III. 5. What is the evidence of the use of seals in Mycenaean times? Describe the chief representations which appear on them.

*6. (a) What do you understand by the terms scarab, scaraboid, paste, cylinder, intaglio, lentoid? Would you assign any particular dates to the objects to which these terms apply? (b) What is a

cameo? Mention instances of famous cameos. For what purposes were cameos employed? How were they made?

7. Who were Dioscurides, Dexamenus of Chios, Pyrgoteles? What works do you associate with their names? Give the names of three other gem-engravers, mentioning, if possible, works executed by them.

IV. 8. Write a note on each of the following: sphyraton; caelatura; Rhoecus and Theodorus; hollow-casting; Chares of Lindos; Perillus.

9. In what way were Delos, Aegina, and Corinth associated with bronze?

*10. (a) Describe shortly the nature of the bronze figures found at Delphi, Herculaneum, Pompeii, Parameythia, Cerigotto (Antikythera), and on the Acropolis at Athens. Of what date are these figures in each case? (b) What light is thrown on the study of Greek statues of bronze by copies of them executed in other materials? How are these copies recognized, and how and when were they made? Mention six of the most famous of them, saying where each now is.

GREEK ARCHITECTURE

THURSDAY, MARCH 17, 1904. 11 A.M.

(Time allowed: One and one-half hours)

The candidate may omit either II or III.

I. Give some account of architecture as it was developed under the Mycenaean civilization.

II. Describe briefly the three orders of architecture, giving each its distinguishing characteristics.

III. Enumerate the different kinds of buildings, religious and secular, with which you are acquainted in Greek architecture, and mention one example, known either by its ruins or from literary sources, of each kind.

IV. Describe the Tholos of Epidaurus, discussing (a) the site and its surroundings; (b) the place and arrangement of the building; (c) its structural and architectural features and peculiarities; (d) theories as to its purpose and function; (e) literary references, inscriptions, and bibliography.

GREEK SCULPTURE

THURSDAY, MARCH 17, 1904. 2 P.M.

(Time allowed: One and one-half hours)

Any one of topics I-IV may be omitted.

I. State the materials at our disposal for forming an estimate of the art of Phidias, and discuss their relative value.

II. Describe the characteristics of the Pergamene School of Sculpture and name the extant works from which our knowledge is derived.

III. Describe, with reference to extant examples, the development of the standing nude male type during the fifth century B.C.

IV. Name the three most prominent sculptors of the fourth century B.C., and give a list of works of theirs which are known from extant originals or copies.

V. Describe four of the following: (1) one of the earliest metopes from Selinus; (2) the group of the Tyrannicides; (3) one of the metopes of the temple of Zeus at Olympia; (4) the Hermes of Praxiteles; (5) the Mausolus from the Mausoleum; (6) the "Alexander" sarcophagus; (7) the Victory of Samothrace; (8) the Borghese Warrior.

GREEK VASES

FRIDAY, MARCH 18, 1904. 9 A.M.

(Time allowed: One and one-half hours)

The candidate may omit one of the first five topics.

I. Mention the characteristics, and give the approximate dates, of three of the following styles: the so-called Proto-Corinthian or Argive, Chalcidian, Cyrenaic, Theraean, Apulian.

II. What is meant by vases under oriental influence? Mention the most important of the classes so designated.

III. What shapes were most employed by the Corinthian potters? Illustrate your answer by outline drawings.

IV. What are the favorite subjects of the painters of the Attic black-figured vases?

V. Give a brief account of two of the following painters or potters: Sosias, Assteas, Epictetus, Amasis I.

VI. Describe carefully the decoration of the François Vase, or that of an Attic red-figured vase with which you are familiar.

MODERN GREEK

FRIDAY, MARCH 18, 1904. 11 A.M.

(Time allowed: One hour)

The candidate may omit I or II.

I. Translate into colloquial Greek:

See here, my boy. Can you tell me what the name of this village is? — It is Tsepheremini, sir. — Very good. Can you tell us the way to Mavromati? — Follow the highway here until you have passed the bridge; then turn to the right into the olive-grove, and take the footpath straight up toward the Monastery, which you will see ahead of you. — Perhaps you could guide us? — Yes, sir, gladly. — Very well. Is there a place in the village where we can leave our bicycles until evening? — Certainly; here at our store. They will be quite safe there; they are good people here.

II. Give the Romaic equivalents of the following:

- (1) Οἱ μετ' αὐτοῦ ἔστησαν πλησίον πηγῆς τινος.
- (2) Τῇ γυναικὶ ἔδωκε τὴν καλὴν αἶγα.
- (3) Ὑπὸ τὸν ὀφθαλμόν.
- (4) Καλῶς ἂν εἶχεν, εἰ ἔγραψε τὴν ἐπιστολήν.
- (5) Τίς πόθεν εἰς ἀνδρῶν;
- (6) Ἐπεὶ ἡσθένει ὁ πατήρ, ἐβούλετο τὸ παῖδε ἀμφοτέρω οἱ παρεῖναι.
- (7) Οὐδέποτε δυνήσεται οὗτος ἐκβῆναι.
- (8) Δευκὰ Ὁρη.

III. Translate into English:

ΔΙΑΛΟΓΟΣ

Ποιητής. Φίλος. Σοφολογιώτατος

Π. Βλέπω ἀπὸ μακρεῖα ἕναν σοφολογιώτατον.

Φ. Ἔρχεται κατὰ μᾶς.

Π. Ἐγὼ δὲν θέλω λόγια μ' αὐτόν. Κίττα πῶς τρέχει. Τὸ πηγῶνι του σηκώνει τὴν ἄκρη ὥσάν νὰ ἤθελε νὰ ἐνωθῇ μὲ τὴ μύτη. Ὡ, νὰ ἐγένονταν ἡ ἔνωσι καὶ τόσο σφιχτὴ ποῦ νὰ μὴν μπορῇ πλέον ν' ἀνοίξῃ τὸ στόμα.

Σ. Ἐτρεχα ὅπως εἶναι τὸ χρέος ἐνὸς καλοῦ πατριώτη νὰ τρέχῃ, ὅταν εἶναι εἰς κίνδυνον ἡ δόξα τοῦ γένους. Ἐνα βιβλίο θέλει τυπωθῇ γλήγορα, γραμμένο εἰς τὴν γλῶσσα τοῦ λαοῦ, ὅπου λέγει κακὸ γιὰ μᾶς τοὺς σοφοὺς, καὶ μοῦ κακοφαίνεται.

Φ. Καὶ ποῖος εἶναι ὁ συγγραφέας;

Σ. Δὲν μοῦ εἶπαν τ' ὄνομά του· μοῦ εἶπαν πῶς εἶναι ἕνας νέος ὁ ὁποῖος γιὰ τὴν κοινὴν γλῶσσα βαστάει πάντα τὸ σπαθὶ στὸ χέρι. Ἀλλὰ γι' αὐτὸν δὲν μέ μελεῖ· μέ μελεῖ γιὰ τὸ κοινὸν ὄφελος.

Π. Τί ὄφελος;

Σ. Ἡ γλῶσσα σου φαίνεται λίγη ὠφέλεια; Μὲ τὴν γλῶσσα θὰ διδάξῃ; τὸ κάθε πράμα· λοιπόν, πρέπει νὰ διδάξῃς πρῶτα τὰς ὀρθὰς λέξεις.

Π. Σοφολογιώτατε, τὰς λέξεις ὁ συγγραφέας δὲν τὰς διδάσκει, μάλιστα τὰς μαθαίνει ἀπὸ τοῦ λαοῦ τὸ στόμα. Αὐτὸ ξέρον καὶ τὰ παιδιά.

IV. Translate into English:

Τὸ γάλα, φωνάζει ἡ ἐπιστήμη εἶνε ἡ μᾶλλον ἀνθρωποσωτήριος τροφή, ἢ ἀγνοτέρα, ἢ φυσικωτέρα, ἢ θρεπτικωτέρα. Ἀλλὰ ποῖον γάλα; Τὸ νερωμένον τῶν γαλατάδων καὶ μερικῶν γαλακτοπωλείων; Ὅχι βέβαια αὐτὸ τὸ γάλα. Ἀλλ' ἐκεῖνο τὸ ὁποῖον ἔχει ὅλα τὰ στοιχεῖα, τὰ ὅποια ἡ ἐπιστήμη ἔχει ἀναγνωρίσει ὡς ἀνθρωποσωτήρια.

Εὐτυχῶς ἀπὸ τίνος εἰμποροῦν καὶ οἱ Ἀθηναῖοι νὰ εἴπουν ὅτι δύνανται νὰ εὔρουν τοιοῦτον γάλα, ὑπὸ τὸ μέγαρον τῆς κ. Κανταντζόγλου εἰς τὴν πλατεῖαν τῆς Ὀμονοίας.

PAUSANIAS AND THE MONUMENTS AND TOPOGRAPHY OF ANCIENT ATHENS

FRIDAY, MARCH 18, 1904. 2 P.M.

(Time allowed: Two hours)

The candidate may omit one question.

I. Translate I, i, 2, Ὁ δὲ Πειραιεὺς . . . τάφος Θεμιστοκλέους. Comment upon *Δήμητρος ἱερὸν* in I, i, 4. Discuss the question of the harbors mentioned in these passages.

II. Translate I, xxii, 4, Ἐς δὲ . . . Ἀπτέρον ναός. What had been the route of Pausanias just before he entered the Acropolis? Discuss the condition of the completed Propylaea with reference to the original plan. What objects of interest does Pausanias refer to as being in or closely adjoining the Propylaea?

III. Translate I, xxvi, 6, Ἔστι δὲ . . . φανῆναι. Trace the route of Pausanias from the Propylaea to the Erechtheum. Give a historical sketch of the Erechtheum. Discuss briefly the building whose foundations are just south of it.

IV. Give a brief history of the Parthenon from the earliest times down to the present. Discuss the interior arrangements of the building.

V. Mention, with short description, the monuments that you remember which are referred to by Pausanias and which are to be located to the north (including northeast and northwest) of the Acropolis.

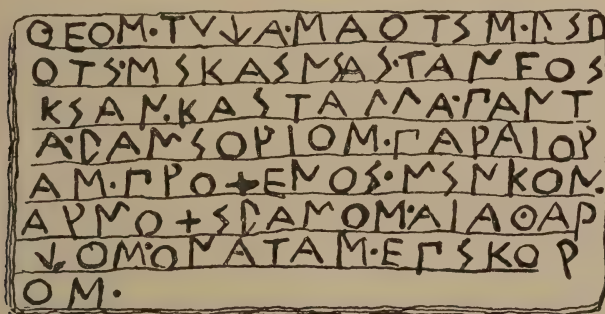
GREEK EPIGRAPHY

SATURDAY, MARCH 19, 1904. 9 A.M.

(Time allowed: Three hours)

I. Transliterate, with accents and punctuation, and translate the following inscriptions. From the evidence furnished by the inscriptions themselves determine their approximate provenience, giving your reasons in full.

(a)



(b)

ΤΟΝΦΟΙΝΟΝΜΕΦΑΡΕΝΕΣΤΟ//VDR
 ΟΜΟΝΑΙΔΕΚΑΦΑΡΕΙΗΙΛΑ+ΑΣΤΟ
 ΤΟΝΘΕΟΝΗΟΙΚΑΚΕΡΑΙΕΤΑΙΚΑΙ
 ΜΕΤΑΘΥΣΑΤΟΚΑΠΟΤΕΙΣΑΤΟΡΕΝ
 ΤΕΔΡΑΨΜΑΣΤΟΝΤΟΥΔΕΤΟΙ.ΚΑΤΑ
 ΓΟΡΕΣΑΝΤΙΤΟΗΕΜΙΣΣΟΝ

II. Do two numbers.

(1) In what respects do the forms of the letters in the earliest extant Attic inscription differ from those in use later?

(2) Trace the history of the forms of ϵ , θ , ν , and υ in the Attic alphabet, and show their value for dating inscriptions.

(3) The characteristic forms of the Cretan alphabet, as found at Gortyna.

(4) The forms of β , ξ , and λ in the epichoric alphabets, including the names of those alphabets in which characteristic forms are found.

III. Give a somewhat full account of any two of the following classes of inscriptions, including both form and contents.

(1) The Athenian tribute lists.

(2) The Ephebic inscriptions.

(3) The Manumission inscriptions.

(4) The Proxeny decrees.

(5) The Cure inscriptions.

IV. Transliterate, with accents and punctuation, the accompanying inscriptions.

AMERICAN SCHOOL OF CLASSICAL STUDIES IN ROME

Fellowships for 1905-1906

The subjects covered by the examinations to be held in March, 1905, with the precise time assigned to each, are named below. Candidates for the Fellowships given by the Institute and the School will omit No. 8; candidates for the Fellowship in Christian Archaeology will omit Nos. 4, 5, and 7.

The books recommended under Nos. 3-8 will serve to indicate the extent of the requirement in each case. For supplementary reading and reference, candidates are referred to the list of "Books Recommended," which was published in the Appendix to each of the first two volumes of the *Journal of the Institute*, where also some description and prices are added.

1. **Latin.** (*Monday, March 13, 2.30-4 P.M.*)

2. **Greek.** (*Monday, March 13, 4.30-6 P.M.*)

The examinations in these subjects are designed chiefly to test the candidate's acquaintance with the literary sources of investigation in classical history and archaeology, and his ability to read the classical authors for purposes of research.

3. **The Elements of Latin Epigraphy.** (*Wednesday, March 15, 9-11 A.M.*)

a. J. C. Egbert, *Introduction to the Study of Latin Inscriptions* (New York, 1896), or R. Cagnat, *Cours d'Épigraphie latine* (3d ed., Paris, 1899).

b. (For candidates for the Fellowship in Christian Archaeology.) Northcote and Brownlow, *Roma Sotterranea*, Part III (see under 8). E. Le Blant, *Manuel d'Épigraphie chrétienne d'après les marbres de la Gaule* (Paris, 1869). E. Le Blant, *Inscriptions chrétiennes de la Gaule* (Paris, 1856-65).

4. **The Elements of Latin Palaeography.** (*Tuesday, March 14, 9-10 A.M.*
To be omitted by candidates for the Fellowship in Christian Archaeology.)

E. M. Thompson, *Handbook of Greek and Roman Palaeography*, Chapters i-vii and xiii-xviii (New York, 1893), or C. Paoli, *Lateinische Palaeographie und Urkundenlehre*, 2 parts, tr. by K. Lohmeyer (Innsbruck, 1889, 1895); with practice in W. Arndt, *Schrifttafeln zur Erlernung der lateinischen Palaeographie* (3d ed., by M. Tangl, Berlin, 1897, 1898), and E. Chatelain, *Paléographie des classiques latins* (Paris, 1884-).

5. **The Physical and Political Geography of Ancient Italy.** (*Tuesday, March 14, 5.30-6 P.M.*
To be omitted by candidates for the Fellowship in Christian Archaeology.)

H. Kiepert, *Manual of Ancient Geography*, Chapter ix (London, 1881), and *Atlas Antiquus*, Tabb. vii-ix.

6. The Topography and Monuments of Ancient Rome and its Neighborhood. (*Tuesday, March 14, 3-5 P.M.*)

O. Richter, *Topographie der Stadt Rom*, 2d ed. (in Iw. v. Müller's *Handbuch*, Vol. III, pp. 725 ff., and separately), or S. B. Platner, *The Topography and Monuments of Ancient Rome* (Boston, 1904).

7. Introduction to Etruscan and Roman Archaeology. (Architecture, Sculpture, Painting, Pottery, Coins.) (*Tuesday, March 14, 10.30 A.M.-12.30 P.M.* To be omitted by candidates for the Fellowship in Christian Archaeology.)

a. ETRUSCAN. J. Martha, *L'Art étrusque* (Paris, 1889).

b. ROMAN. Choisy, *Histoire de l'Architecture*, Vol. I, pp. 512-612 (Paris, 1899), or Durm, *Die Baukunst der Römer* (in his *Handbuch der Architektur*, Darmstadt, 1885). E. A. Gardner, *Handbook of Greek Sculpture*, especially the last chapter (London, New York, 1896, 1897). H. v. Rohden, *Malerei und Vasenkunde*, and R. Weil, (*Römische*) *Münzkunde* (in Baumeister's *Denkmäler des klassischen Altertums*, Vol. II, pp. 851-880, 963-968; Vol. III, pp. 1931-2011). J. F. Hill, *Handbook of Greek and Roman Coins* (Macmillan, 1899).

8. Introduction to Christian Archaeology. (Architecture, Sculpture, Painting.) (*Tuesday, March 14, 9 A.M.-12 M.* To be omitted by candidates for the Fellowships offered by the Institute and by the School.)

F. X. Kraus, *Geschichte der christlichen Kunst* (Vol. I, Freiburg im Br., 1896), or Pératé, *L'Archéologie chrétienne* (Paris, 1892). J. S. Northcote and W. R. Brownlow, *Roma Sotterranea* (2d ed., 2 vols., London, 1879), or either of the following, which are based on the last-named work: F. X. Kraus, *Roma Sotterranea* (2d ed., Freiburg im Br., 1879), or P. Allard, *Rome Souterraine* (3d ed., Paris, 1877).

9. Italian. (*Wednesday, March 15, 11.30 A.M.-12.30 P.M.*)

Candidates will be expected to show familiarity with the ordinary words and idioms of conversation, and ability to read simple Italian prose.

C. H. Grandgent, *Italian Grammar* (3d ed., Boston, 1894) and *Composition* (Boston, 1894). B. L. Bowen, *First Italian Readings* (Boston, 1896). T. Millhouse, *English-Italian and Italian-English Dictionary* (4th ed., 2 vols., London and New York). For additional reading the following works are recommended: Goldoni, *Il Burbero benefico* or *La Locandiera*; De Amicis, *La Vita militare, Spagna, Cuore*; Pellico, *Le mie Prigioni*; Verga, *Novelle*; and especially the archaeological papers published in Italian periodicals, e.g. *Bulletino dell' Imperiale Istituto Archeologico Germanico*, *Bulletino della Commissione Archeologica Commissione Comunale di Roma*, *Bulletino d' Archeologia Cristiana*.

PAPERS SET AT THE FELLOWSHIP EXAMINATIONS OF
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LATIN

MONDAY, MARCH 14, 2.30-4 P.M.

1. Translate Martial, II, 14, 1-10 (*Nil intemptatum . . . nemusque duplex*). Comment on the topographical allusions.

2. Translate Quintilian, I, 1, 26-27 (*Non excludo autem . . . superimposita regentis*). Comment on *tabellae, stilus, ceris*.

3. Translate Vitruvius, V, vi, 8 (*Ipsae autem scaenae . . . aditus in scaenam*). Comment on *mediae valvae, περιάκτους, una a foro, altera a peregre aditus in scaenam*.

4. Translate Pliny, XXXVI, 121-122 (*Agrippa vero in aedilitate . . . in id opus HS [MMM] D.*). Write out the abbreviations.

GREEK

MONDAY, MARCH 14, 4.30-6 P.M.

I. Translate Strabo, V, p. 230:

Αὕτη μὲν οὖν ἡ μάλιστα πιστευομένη τῆς Ῥώμης κτίσις ἐστίν. ἄλλη δέ τις προτέρα καὶ μυθώδης Ἀρκαδικὴν λέγουσα γενέσθαι τὴν ἀποικίαν ὑπ' Εὐάνδρου. τούτῳ δ' ἐπιξενωθῆναι τὸν Ἡρακλέα ἐλαύνοντα τὰς Γηρνόνου βοῦς· πυθόμενον δὲ τῆς μητρὸς Νικοστράτης τὸν Εὐάνδρον, εἶναι δ' αὐτὴν μαντικῆς ἔμπειρον, ὅτι τῷ Ἡρακλεῖ πεπρωμένον ἦν τελέσαντι τοὺς ἄθλους θεῷ γενέσθαι, φράσαι τε πρὸς τὸν Ἡρακλέα ταῦτα καὶ τέμενος ἀναδείξαι καὶ θῆσαι θυσίαν Ἑλληνικὴν, ἣν καὶ νῦν ἐτι φυλάττεσθαι τῷ Ἡρακλεῖ. καὶ ὁ γε Κοίλιος, ὁ τῶν Ῥωμαίων συγγραφεὺς, τοῦτο τίθεται σημεῖον τοῦ Ἑλληνικὸν εἶναι κτίσμα τὴν Ῥώμην, τὸ παρ' αὐτῇ τὴν πάτριον θυσίαν Ἑλληνικὴν εἶναι τῷ Ἡρακλεῖ, καὶ τὴν μητέρα δὲ τοῦ Εὐάνδρου τιμῶσι Ῥωμαῖοι, μίαν τῶν νυμφῶν νομίσαντες, Καρμένην μετονομασθεῖσαν.

When did Strabo live? How much of his work is preserved? What can you say of its accuracy?

II. Translate Polyb. VI, 52:

Τά γε μὴν κατὰ μέρος, οἷον εὐθέως τὰ πρὸς τὰς πολεμικὰς χρείας, τὸ μὲν πρὸς τὰς κατὰ θάλατταν, ὅπερ εἰκὸς, ἄμειναι ἀσκοῦσι καὶ παρασκευάζονται Καρχηδόνιοι διὰ τὸ καὶ πάτριον αὐτοῖς ὑπάρχειν ἐκ παλαιοῦ τὴν ἐμπειρίαν ταύτην καὶ θαλαττουργεῖν μάλιστα πάντων ἀνθρώπων. τὸ δὲ περὶ τὰς πεζικὰς χρείας, πολὺ δὴ τι Ῥωμαῖοι πρὸς τὸ βέλτιον ἀσκοῦσι Καρχηδόνιων. οἱ μὲν γὰρ τὴν ὅλην περὶ τοῦτο ποιοῦνται σπουδὴν· Καρχηδόνιοι δὲ τῶν μὲν πεζικῶν εἰς τέλος ὀλιγοροῦσι, τῶν δ' ἱππικῶν βραχεῖαν τινα ποιοῦνται πρόνοιαν. αἴτιον δὲ τούτων ἐστίν, ὅτι ξενικαῖς καὶ μισθοφόροις χρῶνται δυνάμεσι, Ῥωμαῖοι δ' ἐγχωρίοις καὶ πολιτικαῖς. ἥ καὶ περὶ τοῦτο τὸ μέρος ταύτην τὴν πολιτείαν ἀποδεκτέον ἐκείνης μᾶλλον. ἡ μὲν γὰρ ἐν ταῖς τῶν μισθοφόρων εὐψυχίαις ἔχει τὰς ἐλπίδας αἰεὶ τῆς ἐλευθερίας· ἡ δὲ Ῥωμαίων ἐν ταῖς σφετέραις ἀρεταῖς καὶ ταῖς τῶν συμμάχων ἐπαρκείαις. διὸ καὶ ποτε πταίσωσι κατὰ τὰς ἀρχάς, Ῥωμαῖοι μὲν ἀνὰ μάχονται τοῖς ὅλοις, Καρχηδόνιοι δὲ τοῖναντίον. οἱ γὰρ ὑπὲρ πατρίδος ἀγωνιζόμενοι καὶ τέκνων, οὐδέποτε δύνανται λῆξαι τῆς ὀργῆς, ἀλλὰ μένουσι ψυχομαχοῦντες, ὥς ἂν περιγέωνται τῶν ἐχθρῶν.

Give an account of Polybius.

THE ELEMENTS OF LATIN PALAEOGRAPHY

TUESDAY, MARCH 15, 9-11 A.M.

1. Write a brief sketch of the development of handwriting in Europe from the second to the tenth century, mentioning characteristic details of any two hands.

2. What is the fundamental difference between the writing of the British Isles and the other so-called national hands? Illustrate.

3. What is a palimpsest? Name three famous palimpsests, and give the history of any one of them.

4. In the case of each of the two accompanying facsimiles,

a. State the style of writing and the century to which you would assign it;

b. Name, if possible, the author and the work from which the passage is taken;

c. Transcribe in ordinary long hand, filling out all abbreviations and ligatures. (Scholia need not be transcribed.)

INTRODUCTION TO ETRUSCAN AND ROMAN ARCHAEOLOGY

TUESDAY, MARCH 15, 10.30 A.M.-12.30 P.M.

I. Describe a typical Etruscan town,—its walls, buildings, and tombs.

II. In a history of Etruscan pottery, describe the classes of wares which should receive special attention.

III. Give an account of the technique, style, and use made of jewellery by the Etruscans.

IV. How did the Romans use concrete in building walls and vaults?

V. Give a general description of the Baths of Caracalla.

VI. Trace the emancipation of Roman sculpture from Greek influence.

INTRODUCTION TO CHRISTIAN ARCHAEOLOGY

TUESDAY, MARCH 15, 9 A.M.-12 M.

I. Give an account of the art of pictorial mosaic,—its origin (briefly), its development as a Christian art, and its use in the decoration of churches.

II. To what uses was the art of sculpture put by the Christians of the third and fourth centuries? What were its character and the course of its development then and during the following two centuries?

III. Enumerate briefly the principal themes exhibited in the art of the Roman catacombs, whether in painting or in sculpture.

IV. Distinguish the symbolical from the didactic use of Christian art.

V. What are the characteristics of the Christian basilica, and what theories are advanced to account for its origin?

VI. For what purposes did the Church first employ round and vaulted (or domed) buildings?

VII. Give an account of the general character of the Roman cemeteries previous to the fifth century, and compare them with other Christian cemeteries of the same age.

VIII. What minor arts are especially significant in the history of Christian antiquities?

THE TOPOGRAPHY AND MONUMENTS OF ANCIENT ROME

TUESDAY, MARCH 15, 3-5 P.M.

1. Draw an outline map of Rome in the fifth century A.D., marking the line of the wall of Aurelian, the boundaries of the regions, and the location of the following: *Sucus*, *Fagutal*, *Velia*, *Carinae*, *Tarentum*, *Velabrum*, *Campus Viminalis*, *Petronia amnis*, *Nemus Caesaris*, *Salinae*.

2. Describe the extent and formation of the Campagna, and of the site of Rome itself.

3. Describe briefly the remains of the period of the Republic still existing within the city.

[Answer three of the following questions.]

4. What were the principal *viae* issuing from Rome?

5. Explain the terms *opus latericium*, *tegula*, *porticus*, *templum*, *stagnum*, *angiportus*, *insula*, *portus*, *agger*, *puteal*.

6. Describe the precinct of Juturna, as recently excavated.

7. Describe the Forum of Trajan.

8. Describe the history and course of the Cloaca Maxima.

9. What additions to our knowledge of Roman history have been made by the recent excavations in the Forum?

THE PHYSICAL AND POLITICAL GEOGRAPHY OF ITALY

TUESDAY, MARCH 15, 5.30-6 P.M.

1. Indicate on the accompanying map the several divisions or districts of Italy, and locate the more important seaport towns—one in each district lying on the coast.

2. Locate on the map the two largest rivers, the Via Flaminia, L. Benacus, Caudium, Arretium, S. Cumanus, Mediolanium, Faesulae, Falerii, and give modern names.

3. Draw an enlarged map of Latium, showing as minutely as possible all of its physical and political features; *i.e.* streams, lakes, marshes, mountains, roads, and towns.

THE ELEMENTS OF LATIN EPIGRAPHY

WEDNESDAY, MARCH 16, 9-11 A.M.

I. To what works should one refer for the pagan inscriptions of Rome? for the dated Christian inscriptions of Rome? for the wall-inscriptions of Pompeii? for the inscriptions, pagan and Christian, of Spain? of Britain? of Africa? Name three periodicals which regularly publish newly found inscriptions.

II. In transcribing an inscription, what conventional signs are used for filling in lost letters? for completing abbreviations? for signifying that letters have been purposely erased? that the inscription is false? Who was the chief falsifier of inscriptions?

III. Classify Latin inscriptions generally, (*a*) according to their subject-matter and purpose, (*b*) according to the material on which they appear. Explain the terms *columbarium*, *fistula plumbea*, *devotio*, *olla*, *glans*, *honesta missio*, *loculus*, *graffito*, *cursus honorum*, *vascula arretina*, *sicilicus*.

IV. What evidence of the date or character of the inscription can be adduced from the following expressions? EX SENATI SENTENTIA; BIXIT ANIS VINTI; SIBI ET SVEIS; VTERE FELIX; AB GADIBVS M. P. XII; DIS MANIB. SACR.; I. O. M. SACRVM; BELOLAE POCOLOM; REQUIESCAT IN PACE; HERCOLE DONOM DEDROT. Amplify the following abbreviations: IN H. D. D.; H. M. D. M. A.; S. T. T. L.; LEG. AVG. PR. PR. PROV.; H. M. H. N. S.; L. D. D. D.

V. Give the official names of Tiberius, Claudius, Caligula, Caracalla. Rewrite in full the following inscription, amplifying all abbreviations and expressing numerals in words, and translate it into English. What emperors are referred to, and when did they reign?

IMP. CAES. DIVI TRAIANI PARTH. FIL. DIVI NERVAE NEP.
 TRAIAN. HADRIANO AVG. P. M. TR. P. XXII. IMP. II. COS. III.
 P. P. ET DIVAE SABINAE IMP. CAES. T. AEL. HADRIANVS
 ANTONINVS AVG. PIVS P. M. TR. P. II. COS. II. DES. III. P. P.
 PARENTIBVS SVIS.

ITALIAN

WEDNESDAY, MARCH 16, 11.30 A.M.-12.30 P.M.

1. Translate into English:

Amico carissimo:

Tutto era preparato per la caccia, ma non uno degli amici ha mantenuto la parola ed io restai a casa. Primieramente io non mi sarei divertito molto, se fossi andato solo, e poi, siccome il tempo era cattivissimo, mia madre mi pregò a restare a casa. La prossima settimana, ai tre o ai quattro (giovedì o venerdì mattina), io vengo a Firenze. La mia prima visita sarà da te, ed in questa occasione stabiliremo il tempo per la caccia del mese venturo. Tu devi fare il possibile di mantenere la promessa, altrimenti passerebbe l' intiero autunno senza sparare i nostri fucili.

Ti prego, mio ottimo amico, ad aspettarmi in casa tutta la mattina del giovedì prossimo, almeno sino alle undici, perchè, non restando io in Firenze che poche ore, mi spiacerebbe assai venirvi e non ritrovarti. Il tuo caro fratello sarà già ritornato a Parigi, ma quando gli scrivi, salutalo da parte mia. Avrei avuto gran piacere a vederlo, ma io non ho potuto allontanarmi un solo dì da casa. Gli scriverò quantoprima.

A rivederci in pochi giorni. Ricevi un saluto cordiale dal tuo sincero amico. . . .

2. Translate into Italian:

I have written this in order that he may be persuaded of the condition of things, but it appears that he has not understood me. He is the most diligent scholar that I have ever had. I fear that it will rain soon. If he had asked me for the money, I should have given it to him. I arrived last evening, between nine and ten, in this city. I am still tired from the journey, but as regards health I cannot complain. The trip was fine, and the company very agreeable.

3. Give the present and perfect (preterite) indicative and present subjunctive of *piacere, porre, sapere, vedere*.

4. Give the Italian equivalents for the following nouns, prefixing the definite article in each case: *street, lead pencil, knife, sugar, poet, instrument, wife, Italians, animals*.

THE SCHOOL AT ATHENS

Students who desire admission to the School at Athens should address either the Chairman of the Managing Committee or the Director of the School. The application should be accompanied by a statement of the preparation of the applicant.

The student should gain as great command as possible of the German, French, and Modern Greek languages before going abroad; and the summer preceding a year at the School may profitably be spent in France or Germany, working in the Museums (Paris, Berlin, Dresden, Munich) and obtaining practice in French or German conversation.

The usual port of arrival in Greece for those coming from Western Europe is Patras, eight hours by rail from Athens. To Patras the shortest sea route is from Brindisi (thirty hours, including the stop at Corfu), with three steamers weekly. Those who come from countries north of Italy will avoid the long railway journey to Brindisi by taking the weekly express steamer from Trieste. The Italian steamer from Venice is less direct.

From Marseilles there are fortnightly steamers to the Piraeus, via Naples; also to Patras; and from Genoa, via other Italian and Sicilian ports, to the Piraeus, touching at Crete.

If the student wishes to go directly from America to Italy, he will take one of the lines which have a regular express service from New York to Genoa and Naples (minimum price about \$95 for first-cabin passage), or one of the *Navigazione Generale* or the Prince Line Steamers to Naples. Brindisi is twelve hours by rail from Naples.

The cost of living in Athens is very much what one chooses to make it; but one may live cheaply with much more comfort than in America. At the large hotels in Athens, board and lodging can be obtained for \$14 per week; at small hotels and in private families, for \$5.50 per week, and upward. A limited number of men students may have rooms, without board, in the School building at Athens.

The School library at Athens, which now contains more than four thousand volumes, provides all the books that are most essential for study in Greece, and the student in travelling should encumber himself with few books.

THE SCHOOL IN ROME

Students who desire to apply for admission to the School in Rome should address, if in America, the Chairman of the Managing Committee, Professor Andrew F. West, *Princeton University, Princeton, N.J.*; if in Europe, the Director of the School, Professor Richard Norton, *Villa Bonghi, Via Vicenza, 5, Rome, Italy*. If they wish to compete for the Fellowships offered, they should address the Chairman of the Committee on Fellowships, Professor John C. Rolfe, *4400, Chestnut Street, Philadelphia, Pa.* In any case the application should be accompanied by a full statement of the preparation of the applicant.

The provision for the admission of special students is intended for the benefit, not of ill-prepared persons, nor of those who through circumstances or disposition do not desire to devote at least a full year to study in the School, but primarily for advanced students who have undertaken some special topic for research which can well be carried on under the auspices of the School, but does not require residence in Rome for an entire year.

Students should plan, if practicable, to spend at least two years in study at the School, in order to profit in fullest proportion from the labor and expense involved. But well-directed work for a single year will yield very rich returns, if previous preparation is sufficient. Every student must be able to read not only Latin and Greek, but also French and German; and a knowledge of colloquial and of written Italian, if not previously attained, must be acquired as speedily as possible. This last, however, is an easy task, especially if the student can spend a considerable part of the summer preceding his entrance into the School in residence and in the study of the Italian language in some one of the picturesque and healthful hill towns of Tuscany or Umbria; and summer residence in the larger cities, like Florence and Rome, is considered by many who have had experience to be no more dangerous than summer residence in most cities of America, though the weather, especially in August and September, is usually hot and likely to prove somewhat debilitating.

Some preliminary acquaintance with at least the elements of the subjects of study usually pursued in the School will be found of the greatest advantage, and the fuller this knowledge, the sooner will the student be ready to take up that independent work, the many opportunities for which are among the greatest gifts that Rome has to offer. The books that are especially recommended for the study of competitors for Fellowships are precisely those

that all prospective students of the School in Rome might study to great advantage.

An announcement of the lectures and other forms of instruction offered by the School is usually issued in April or May of each year, and a copy of this circular for the current or for the coming year will be sent to any person on application to the Chairman of the Managing Committee, or to the Director of the School. The General Regulations of the School are published on pp. 133-139 of this SUPPLEMENT.

The School possesses a small but well-selected and growing library. Students have also free access to the National libraries and museums of Rome, and leave can be readily obtained to draw books from such of the libraries as are lending-libraries. Competent students have also been most generously admitted in the past to the lectures and excursions of the German Archaeological Institute, and to the use of its fine library; and have been allowed with the utmost kindness to pursue palaeographical studies in the Vatican Library, and in other collections of manuscripts in the city and the kingdom. Permission is also readily given to attend lectures in the University of Rome.

The school building is the Villa Bonghi, situated at Via Vicenza, 5 (near the Piazza dell' Indipendenza), in an excellent and healthful quarter of the city. It contains the residence of the Director and the library and study-rooms of the School. No lodgings are provided for students, but there are *pensions* in Rome in which board and lodging can be had at a minimum price of about five lire a day, a maximum price of about twelve lire, and an average price of about eight. There are also good and cheap restaurants, and in the past some students have hired furnished rooms, and taken their meals where and when they pleased; but this arrangement is not recommended, on the ground of danger to health. The Director will willingly assist students to find suitable lodgings. These estimates are for men; expenses of women are necessarily somewhat higher, and it should also be noted that the privileges for study in Rome are not yet all granted to women. In estimating their expenses for the year, students should make allowance for numerous small expenditures incidental to residence in a large city and to the proper prosecution of their work, such as fees, doctors' bills, and outlays for occasional *permessi* and for short journeys.

The rates of first-cabin passage from New York to the ports of Northern Europe, or to Genoa and Naples direct, vary from about \$50 to \$125 and more, according to the speed and equipment of

the steamship selected, and the situation of the stateroom and the number of persons occupying it. About \$25 or \$30 must be allowed for the cost of a second-class railway ticket from London or from the German ports to Rome. Rates of steamer passage are liable to sudden change, and the intending traveller had better apply, within a few months of his journey, to some one of the general tourist agencies (such as those of Messrs. Thomas Cook & Son, or Messrs. Clark & Co., both on Broadway in New York), which will send on request a handbook giving dates of sailing and rates of passage by all the trans-Atlantic lines.

The Chairman of the Managing Committee will be happy to give prospective students any further information within his power.

CASTS AND PHOTOGRAPHS

The Twelfth, Thirteenth, Fourteenth, and Fifteenth Annual Reports of the School at Athens contain a list of plaster casts of objects found in the excavations of the School at the Argive Heraeum and at Icaria which may still be had on application to J. H. A. Walthausen, 454, West 41st Street, New York, N. Y.

In the spring of 1896, the School in Rome had mouldings made of the Triumphal Arch of Trajan at Beneventum, under the direction of Professor Frothingham, the Associate Director of the School in 1895-96, who has given an account of the work in his Report for the year. This report was published in the first number of the Journal of the Institute for 1897. A new, illustrated edition of the catalogue of casts from the moulds has been prepared, which gives the price at which each of the (28) casts is sold. The price of the entire series is \$800, not including the cost of packing and transportation. Correspondence regarding these casts may be addressed to the Director of the American School of Classical Studies, *Via Vicenza, 5, Rome*, or to the Chairman of the Managing Committee, Professor Andrew F. West, *Princeton University, Princeton, N. J.*

PHOTOGRAPHS

The Eleventh Report of the School at Athens contains a list of 274 photographs of Greek sites and antiquities taken by Dr. Clarence H. Young, a member of the School in 1891-92. Size A, $6\frac{1}{2} \times 8\frac{1}{2}$ inches, 20 cents each; size B, 4×5 inches, 12 cents. Unmounted. Orders should be addressed to Dr. Clarence H. Young, 312, West 88th Street, New York, N. Y.

ADDENDA

The following names should be added :

To the list of the Council, pages v, vi.

Professor Henry W. Haynes (*Boston Society*), 239, *Beacon Street, Boston, Mass.*

Mr. J. S. Slauson (*President of the Southwest Society*), *Los Angeles, Cal.*

To the list of the Baltimore Society, page 73.

Mr. Frank Frick, 1514, *Park Avenue.*

To the list of the Chicago Society, page 79.

Dr. T. L. Comparette, 5829, *Jackson Avenue.*

To the list of the Cleveland Society, page 87.

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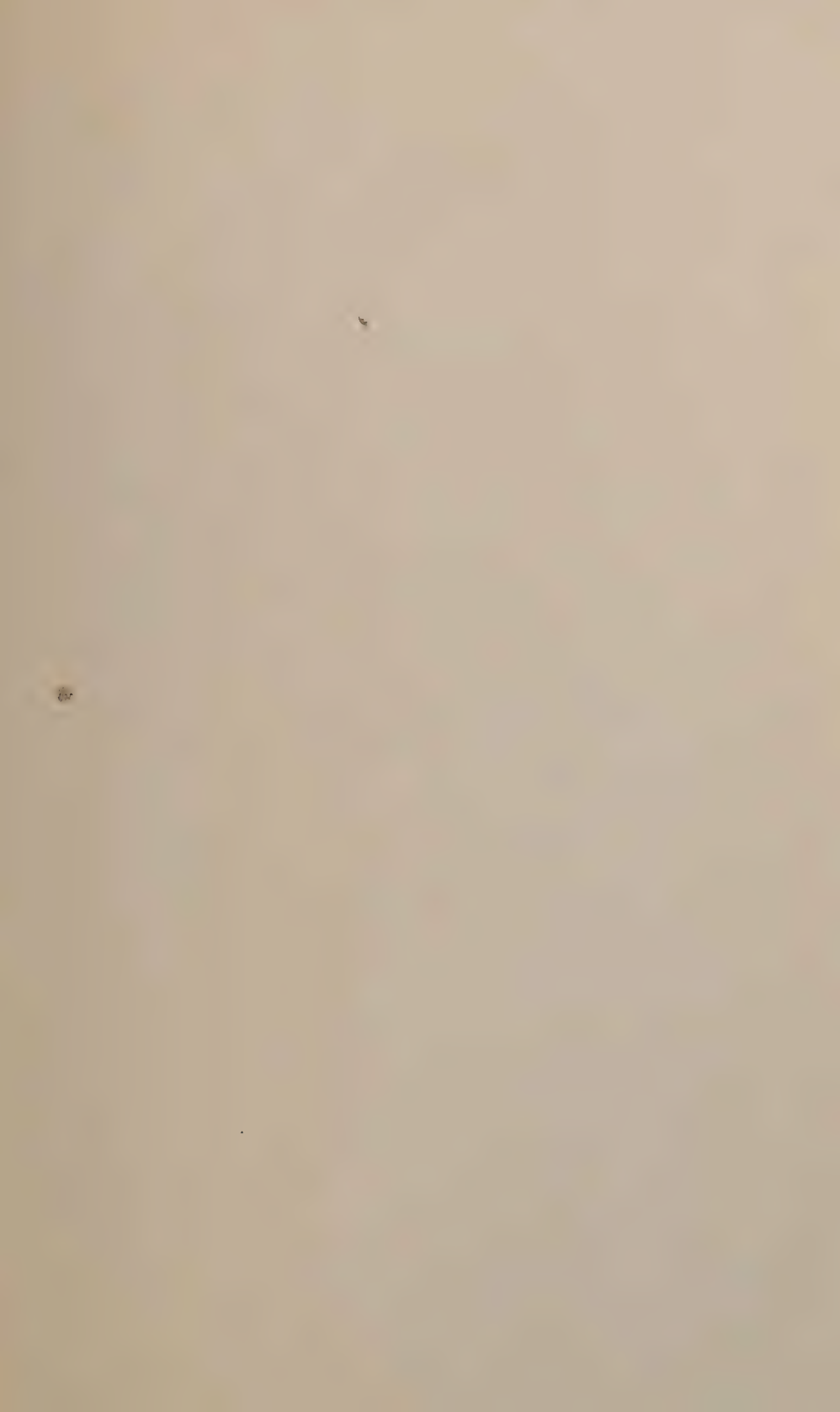
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